

TECHNOLOGICAL MUSEUM, SYDNEY.

(Descriptive Catalogue, No. 1.)

RAW WOOLS, AND SPECIMENS

TO

Illustrate the Woollen Manufacture ;

BY

ALFRED HAWKESWORTH,

HONORARY WOOL-CLASSER TO THE MUSEUM.

EDITED BY THE CURATOR,

J. H. MAIDEN, F.L.S., F.C.S.

SYDNEY : CHARLES POTTER, GOVERNMENT PRINTER,

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PREFACE.

THE prodigious development of the wool trade in the Australian Colonies ought to be regarded as a subject of great moment; and as the collection of wools, showing the many various types, as well as illustrating the different stages of manufacture, forms an important department in this Museum, it is deemed desirable to issue a catalogue of the specimens, with as much technical information as convenient.

The great object of this catalogue is to further the interests of the wool industry; and it is hoped that it will be of particular interest to wool-growers, bringing them face to face with the requirements of manufacturers.

The foundation of the pastoral industry is of sufficient importance to merit a glance at the trials and difficulties which the early pioneers encountered in the formation of their flocks. All honour is due to Captain John Macarthur and the Rev. Samuel Marsden, as the founders of the first flocks and the introducers of merino sheep at the beginning of this century. By their judicious cross-breeding they also laid the foundation of this premier industry of Australasia.

In Bonwick's "Romance of the Wool Trade" will be found some interesting particulars relating to the difficulties they met with at first. Mr. Marsden made a report to the Governor on August 11, 1804, which was accompanied by specimens of the wool then produced at Parramatta.*

On comparing the wool grown at the present day with that produced in the early part of the century, the casual observer cannot fail to be struck with the great improvement effected, and the high position taken by these Colonies in perfecting the merino fibre quite surpasses the efforts made in Europe in the same direction.

Climatic conditions, and the different and varied nature of the soils, have all assisted in the attainment of that pre-eminence at which our breeders have been aiming for the last forty years; and, whether we look at the density of the Mudgee type, the soft and silky wools of the Riverina, or the bold and lustrous fleeces of the western district of Victoria, we cannot but congratulate ourselves upon the immense strides made in the improvement of the Australian merino.

That our leading breeders have come as near perfection as possible is proved beyond doubt, by the high spinning capabilities of fleeces recently tested,† and it is to be hoped our flock-owners and pastoralists will emulate the highly satisfactory results already attained. Such results as these can only be obtained by following the blood, judicious crossing, careful classing and culling, and due attention to feed and water.

* The identical samples are in the Museum (see p. 2), and are in an excellent state of preservation.

† One pound of merino wool has been spun into a thread over 92 miles long.

The importance of wool and sheep classing cannot be over-estimated, and breeders could not do better than examine the different classes of wool grown in various districts and now on view in this Museum.

But while, as already stated, our leading breeders have obtained a wool as near perfection as possible, there are flocks in the Colony which can be numbered by the hundred, which yield a wool hard in the hair, short, and devoid of weight and quality. This is the consequence, amongst other things, of carelessness, breeding from sheep of doubtful pedigree, and want of careful culling and classing.

Now that a low level of prices for wool has been reached, it behoves every pastoralist to send to market an article which will command inspection and competition.

The results of the London sales for 1887-88 echo the same report: "Good demand for superior; faulty and medium lower, with drooping tendency." Surely this can and ought to be remedied. Valuable as is our mineral wealth, it sinks into insignificance in comparison with the value of wool; and it is on the growth and export of this valuable article that the wealth and prosperity of Australia must, for some time to come, depend. Since the discovery of gold in 1851, the average production of the precious metal in New South Wales only averages a fraction over £1,000,000 per annum, whilst the value of the "Golden Fleece" reaches the enormous sum of £7,000,000 per annum, and for the years 1885 and 1886 the enormous sum of £9,000,000.

This catalogue represents the state of the wool collection in this Museum up to the latest possible date. Flock-masters will themselves be able to supply deficiencies where they perceive them; and it is to be hoped they will realize the mutual advantage to the public and themselves which will accrue from the leading wool collection in the mother Colony being as nearly perfect as it can be made.

Specimens of about 6 oz. in weight should be sent, and, if desired, a report upon each sample will be given. Particulars in regard to flocks and breeds will always be acceptable.

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Notice to Visitors and Correspondents.

THE high numbers, in rather heavy type, are the register-numbers of the Museum, and should be quoted, wherever possible, in all inquiries at the Museum, whether verbal or written. The small numbers are of course but sequence numbers. These high register-numbers were discontinued on 31st December, 1888, and a special stock-book for wool-samples commenced with the year 1889. All entries in that stock-book are denoted by the letter "F."

THE RAW MATERIAL.

I.—Raw Colonial Wools.

1.—NEW SOUTH WALES.

A.—To 1887 Clip.

Specimens of the first-produced Australian wool.

13,286.

No. 1. "Hair from ewe, such as has been commonly imported from India and the Cape." This specimen is evidently from an Indian sheep, and comparison with wools from that country confirms this statement. All sheep bred and reared within the tropics, if not very carefully treated, by classing, culling, and introducing fresh blood, throw hair instead of wool, and the appearance of this specimen is more like a white and brown kemp, being very straight in fibre as well as hard and brittle.

No. 2. "Wool from daughter of No. 1; the father half-bred Spanish ram, and coarse-woolled ewe," which, even at first cross, gives decidedly a wool without any trace of hair, although very low in quality and fuzzy. It appears to bear no relation to No. 1.

No. 3. "Wool two removes from No. 1, from half-bred Spanish ram." Here we have a decided formation of staple, little finer in quality, with rough tip.

No. 4. "Wool from ram, the produce of Spanish ram and coarse-woolled ewe," giving staple of fair length, and showing slight serration.

No. 5. "Wool from ewe, the produce of Spanish ram and coarse-woolled ewe," which gives more brightness, lustre, and improved serration, but less merino type.

No. 6. "Wool from a male, the produce of Spanish ram and ewe similar to No. 3." This appears to be breeding back a little from No. 5; although broadly serrated it has not its brightness, and is much rougher and coarser.

No. 7. "Wool from male, the produce of another Spanish ram and ewe similar to No. 3." This is by no means an improvement on No. 3, being much lower in quality and more deficient in serration. This sample is considerably over twelve months' growth, nearer two years, not taking the length into consideration; the mode of crossing has not advanced the type of wool.

No. 8. "Wool from Spanish ram bred in the Colony." This style of wool does not resemble Spanish merino in the least, it has a strong coarse cross in it.

Parramatta, 11 August, 1804.

The Reverend Mr. Marsden's observations in the breed of his flock of sheep, with the enclosed specimens, as plucked (*sic*) from the fleeces, humbly submitted to His Excellency the Governor (King) for his information.

The preceding paragraph, together with the short descriptions of the samples in inverted commas, are the words of the Rev. Samuel Marsden himself. The specimens were found amongst some papers recently sold to the Agent-General, in London, for New South Wales, by Lord Brabourne, and by the Honorable the Colonial Secretary they were presented to this Museum.

It is deeply interesting to read of the efforts of the pastoral pioneers of Australia, and among them the name of John Macarthur will ever stand pre-eminent. The story of his difficulties and triumphs has often been recounted, and is as familiar in our mouths "as household words." But the object of the present catalogue being to describe specimens actually in the Technological Museum, our remarks will be directed to that end. The following allusions to the Rev. Samuel Marsden's connection with the inception of the wool industry are taken from Bonwick's "Romance of the Wool Trade":—

The clergyman consorted with the primitive sheepmasters in the inquiry how best to develop wool production and improve the sheep breed. He was no mere talker and writer, but an enthusiastic and scientific experimenter. By careful selection, wise supervision, and indefatigable perseverance, he gathered together a flock of first-class character, and the "Marsden" breed enjoyed a reputation for many years.

His stock enterprise led him to open up in 1803 a correspondence with the early and constant friend of Australia, Sir Joseph Banks, because, as he briefly told the worthy philosopher, of "your known and ardent wish to promote the good of the Colony."

As Mr. Fleming was returning to England with a collection of plants gathered in New Holland, the clergyman wrote: "I have requested him to make such a collection as will benefit the settlement of fruits, seeds, &c. I have been more than nine years in this Colony during which period I have paid much attention to agriculture." Then he mentions his need of a couple of English rams, and asks that gentleman's kind help to select such for him, and have them shipped to Port Jackson.

He had learned of Sir Joseph Banks' interest in the merino, and of his undertaking the care of King George the Third's Spanish sheep. To none other could he write with more satisfaction. In his letter he referred to rams brought out by Major Johnson and Captain Kent, but these were regarded as of little value, from bad selection.

Two years later he expressed to this gentleman his wish for rams of Leicester and Lincoln breeds, remarking that already he possessed Spanish, Southdowns, and Teeswater. Forwarding a sketch of one of his New South Wales bred rams, he proudly said: "My attention has been very much turned to improve our flocks."

In his celebrated report, addressed to Governor King, August 11, 1804, forwarded to the Colonial Office, Mr. Marsden entered into particulars of his own part in sheep culture. His flock at that time amounted to no less than 1,200. Of his collection of wool specimens (above described), with some of the hair from the Colonial, Cape, and Bengal animals, Mr. Arthur Young, of the English Board of Agriculture, formed a high opinion, and, in a communication in March, 1805, that distinguished farming authority made a curious suggestion of interest at this later period: "I think," said he "New South Wales bids fair for putting down the Spanish flocks in England, provided fleeces can be pressed like trusses of hay without injury—an experiment I do not know has yet been tried."

Mr. Marsden's report has the record of one of his experiments.

"About eight years ago," wrote he in 1804, "I began to purchase, when opportunity offered, a few sheep from the different ships which visited the ports. They came either from the Cape or India. Their fleeces were in general hair. About six years ago I obtained one male and one female Spanish sheep. The male was put to the above hairy ewes.

"In the first produce there was a wonderful improvement of the fleece; but the sheep were not so large and healthy as I expected, many of them dying when about a year old. I endeavoured to find out the cause of this mortality, being equally anxious to promote a hardy breed of sheep as well as to improve the fleece.

"At this time I fed the whole of my sheep in the woodlands. The grass was often very long and coarse, and also wet, either with the dews or rain, as the sun could not dry the ground, from the thickness of the timber. It occurred to me that the sheep feeding through this long wet grass, in which they are almost covered, was partly the cause of the mortality among them. At this time nearly the whole flock appeared sickly, but the produce of the Spanish was much worse than the other common sheep. From this circumstance I inferred that they were more tender and delicate.

"I had now about a hundred acres of land cleared from timber, and under different crops, and was determined, when the crops came off, to let the ground lie fallow for the sheep to feed upon, especially in wet weather and heavy dews, hoping this would restore the flock to health and strength. My expectations were verified, as the flock immediately recovered. From this time, which was in the year 1800, to this period, the flock has been rapidly improving both in fleece and weight of carcase."

Going on a visit to England, he had the honour to be presented with five merinos from the King's flock.

Specimens of wool from A. Lucian Faithfull, Esq., Springfield, Goulburn, 146 miles from Sydney.

4,465, 18,171.

This stud flock was first formed in the year 1838 by W. P. Faithfull, Esq., who purchased ten rams from James and William Macarthur's Camden Park flock, and therefore the progeny of the first pure-bred Spanish merino introduced into Australia, which were presented to Captain John Macarthur by George III in the year 1800.

In the early history of Australian merinos, culling and classing were not much thought of or practised; and the owner, to improve his flocks, purchased annually ten rams from the following pure merino breeders:—Messrs. Edward Cox, Jas. Riley, and N. P. Badgery, so that this flock for forty-four years has had nothing but the best merino blood.

In 1871, Mr. A. Lucian Faithfull undertook the management of the Springfield flocks, and began by classing for two purposes—1st, a high type of merino to produce quality and density; 2nd., a deeper or stronger and longer style of wool; and, out of the flock of 4,500 Springfield ewes, selected for No. 1, 63; and for No. 2, 82; and these have been kept separate ever since.

In 1872 the sixty-three high class stud ewes were mated with a ram (No. 43) bred by the late Hon. E. King Cox, purchased at Rawdon, 1870, and a descendant of that famous Prussian Silesian sire "Prince Lichowski"; and from this strain, to a great extent, comes the present fineness and density so noticeable in the Springfield wool.

The ewes from this cross were mated to a "Luc" ram purchased from James Riley, Esq., and in 1875 to stud ram No. 01, bred by E. S. Antill, Esq., which was sired by a David Taylor ram which cost originally in Sydney £105, the dam of No. 01 being a pure Bayly or Cox ewe. This ram in 1878 was replaced by No. 3 "Viscount," bred by James Gibson, Esq., Bellevue, Tasmania, and himself a prize taker, taking Champion two years in succession at Yass, N.S.W., and whose offspring took twenty-eight first prizes and seven second.

The Springfield extra stud flock now numbered 143 of the highest class of wool, combined with weight; and in 1877 there were further introduced twenty stud ewes from the St. Johnstone flock, bred by David Taylor, Esq., Tasmania, and at this time these ewes and progeny number 115.

In the same year also twenty stud rams were purchased from the well known Tasmanian breeders, Messrs. James Gibson, W. Gibson and Son, W. H. Gibson, and H. Gatenby, and the best of these, "Viscount" and "Noble," were used in the extra stud, and the remainder (with the exception of three sold) were used in the second stud flock. "Noble" took first prize in Sydney, 1878. In 1879 that grand ram "Duke of Richmond," bred by Mr. Toosey, which was placed second for Champion's Cup in Tasmania, was used, and for length, quality, and quantity of wool was highly commended. In 1881 the owner made a still more important addition by importing from Messrs. W. Gibson and Son, Seone, Tasmania, that splendid stud ram "Grand Prince," which, after serving 213 stud ewes, took Champion Prize at Goulburn, and was purchased by R. C. Cooper, Esq., at auction for 190 guineas.

More classic rams were added in the year 1883, purchased from Messrs. W. Gibson and Son—"Royal Duke Third," 325 guineas; and "Prince Victor," 235 guineas.

The eighty-two strong woolled ewes were mated in 1872 to No. 32. No. 32 was a stronger type of wool than No. 13 although from the same flock, bred by the late Hon. E. King Cox. In 1874 a son of No. 32 was used. In 1877 a David Taylor ram, No. 5 "Trojan," was introduced, which was purchased in 1877 at Messrs. Mort and Co.'s sales in Sydney, and was the largest framed and most heavily woolled ram sent from Tasmania that year, his fleece weighing 16½lbs., 16½lbs., and 17½lbs. three years in succession, twelve months' growth, grass-fed only, and heavily used at stud. In 1879 and 1880 sons of "Trojan" were used, and in 1882 a Canowie ram was tried as an experiment with thirty strong woolled ewes; but this was an entire failure.

The Springfield sheep have been great prize-takers. The following may be especially mentioned, viz.:—Six Firsts and two Second Prizes for wool at Sydney Metropolitan Agricultural Society, New South Wales; Honorable Mention, Paris Exhibition, 1878, for wool; Certificate of Merit at Goldsbrough Exhibition of Merino Wool, 1878, for the most valuable fifty fleeces; seventy-five prizes at Murrumbidgee Pastoral and Agricultural Society, Wagga Wagga, 1884-1887, and Gold Medal, Centennial Exhibition, Sydney, 1888.

There are twenty-five samples of wool in the Museum, which, on careful examination, can be suitably arranged into three grades or classes:—

No. I.—Very fine and dense or superior wool.

No. II.—Little longer, but not so fine in fibre.

No. III.—Much longer, stronger, and a little coarser.

Grade I.—No 1. Superior combing wool from stud ram; of medium length, of pure, lustrous, and full stapled fibre, which is beautifully clear, evenly though finely serrated, of great density, very elastic, with soft, kind, silky touch. It has very little tip, thus giving little noil—a great consideration in combing wools. As a type for introducing into other flocks it is of great value, and holds the premier position amongst wools in the New South Wales collection of merinos.

No. 2. Wool from stud ram; of nice length, and probably a very near relation to No. 1; a trifle shorter and a shade lower in quality; has a large serration, with true formation and classic type of the former.

No. 3. Stud ram's wool, resembling the former in clear pure staple, of combing length, with a smaller serration and a little more tip, producing heavier in noil.

No. 4. Superior combing wool from stud ram; very fine, soft, bright, and elastic, with density and small serration; a little lower in quality.

No. 5. Combing, of superior quality, from stud ram, with full-woolled and bold staple; is very dense and bright, with little tip.

No. 6. Carding wool, of extra quality, lacking in length as compared with the previous samples, but for purity, density, and clearness of fibre, is not in the least inferior to others in this flock.

No. 7. Same type as No. 6, but a little more wasty tip.

No. 8. Little longer in staple and more noily tip; not so full as previous specimens; well serrated; very soft and pliable.

No. 9. From stud ram, and comes in Grade II,—fine combing; being a good length, with bold, full-woolled staple from top to bottom; is pure, clear, dense, distinctly serrated, silky, and pliable. As a true specimen of a lustrous sound combing, it has no superior in this collection.

No. 10. Fine combing wool from stud ram; a smaller serration than No. 9 and of great density, but giving little more waste; in other respects it resembles the former.

Nos. 11 and 12. Resemble each other, being a little lower than previous specimens, which is the only distinction between them.

No. 13. Very close compact fine combing, of nice length, small and regular serration, with plump staple and very little waste.

No. 14. Fine combing wool from stud ram, 364 days growth. Though shorn four years it is much of the same type as the present Springfield wool, only with a little fuzzy tip.

No. 15. A clear bright combing with heavy tip; lower in quality, but shows that lustrous and even-woolled staple so well defined in this flock.

No. 16. Fine combing, showing serration extremely small, but with the same pure, clear, elastic, silky staple as the others.

No. 17. Stud ram combing wool, with more length of staple; not so fine as others; with rather wasty tip, but with the general character of the other wools.

No. 18. Wool from stud ram, of medium length, largely serrated, full of sound pure wool of great brightness.

No. 19. This comes in Grade III, or the strong combing grade; is from stud ram, and, as a deep grown wool, with fineness and great length of staple combined, is as near perfection as possible. Many strong combings when twelve months grown lose to a great extent that fineness of fibre, which is fully retained here, along with a long bold and well-proportioned, full staple from top to bottom, with all that soft kind feel so noticeable in the finer sorts. This sample is distinctly serrated and clear, and would be much prized by worsted spinners and manufacturers; will give full weight in "top."

No. 20. A strong merino, of great length; inferior to No. 19; staple very bold and full, broadly serrated, of pure wool.

No. 21. From stud ram, differing only from last sample in length of staple.

No. 22. From stud ram; inferior in both length, quality, and general character; inclines to be wiry and stringy, with wasty tip; rather open, with hard feel.

No. 23. Fine combing wool of stud ewe ; the type is retained here ; the description of No. 19 applies here generally. It is evident that the ewe has transmitted her good qualities to her progeny.

No. 24. Wool from stud ewe, differing from No. 23 in being a little thinner in staple, but longer ; it is fine, bright, and free.

No. 25. Much shorter, but very dense and lustrous ; from stud ewe.

Fourteen specimens of wool from stud rams, bred by
J. Brindley Bettington, Esq., Brindley Park, Mer-
riwa, 198 miles N.W. of Sydney.

18,057.

The Brindley Park sheep, so favourably known amongst breeders as one of the choicest, most reliable and pure-bred flocks of Silesian blood in New South Wales, and standing comparison with the best stud flocks of this Colony, must be placed in the front rank as a class of sheep for crossing with many different types of merino to infuse density and that fine softness, with length and elasticity, which are of the highest value to breeders, wool-growers, and manufacturers.

In 1830, this flock was founded by the late Mr. J. B. Bettington, who imported a few merino rams and ewes from Silesia. In 1849 another Silesian ram was added, and in 1860 two very high class rams were purchased from Prince Lichnowski's renowned flock. Great care and attention have been paid in culling and selecting, and in 1868, a prize ram was procured from the late Mr. C. C. Cox's Broombee stud, which is the sole instance of the introduction into this flock of any other sheep than imported Silesian.

The Brindley Park wool gained leading honours at the Philadelphia Centennial Exhibition 1876, and at the wool shows of Messrs. Goldsborough in 1878, the Paris Exhibition 1878, the Sydney Exhibition of 1879-80, &c.

No. 1. This specimen, although the finest and shortest in these samples, is much longer in staple than we generally find in the Silesian merino type, which is classed amongst the carding or clothing wools, implying shortness. Here we find a wool of medium length, which will comb ; of good quality and density, with pure clear fibre, regularly serrated, with full staple, very soft, silky, pliable, and altogether a satisfactory style of wool to grow.

No. 2. Much longer in staple, which is very free, with deep serration, elastic, sound and bold ; will return full weight in "top."

No. 3. As a long silky wool, of good quality, bold serration, and little waste, this is a nice specimen of a combing sort ; has little noil.

No. 4. A little stronger and shorter than No. 3, with distinct serration and brightness.

No. 5. This is a very long-stapled wool, and may be termed deep grown, with sound, bright, silky fibre ; well serrated and elastic.

No. 6. Little coarser, shorter, with thin staple, boldly serrated, and bright.

No. 7. Showing wool from back part of No. 1 ; is as sound and well grown as could be wished for, and shows no falling off. If there be a weakness in any part of a fleece the back is the place to look for it ; and this sample retains all the good qualities of the other part of No. 1.

No. 8. As a wool from the back of fleece, it resembles in all respects No. 2, of which it is a part.

No. 9. Back part from same fleece as No. 6. and a bold, sound, well-grown wool.

No. 10. To show the great character of the Brindley Park wool, this gives a sample of breech or britch (lowest part of fleece grown on thigh), and when well grown, and showing general character of fleece, indicates high-class breeding. This sample is all that could be desired.

No. 11. Breech wool, from No. 6: decidedly a heavy coarse wool, and shows a falling off as compared with the other part of fleece.

Nos. 12, 13, 14 are "belly wools" from Nos. 3, 4, and 5. These are specimens which justify the high praise which is bestowed on this flock for its high-class breeding. It is very rarely that we find such long, strong, well-developed wool as these belly pieces, which are of a good combing length and compact, with well-waved staple. If there be a good well-grown belly piece, other parts are certain to be well covered.

Sample of rams' wool from Messrs. Lackey, Wallace, and Mills, Nubba Station, Cootamundra, 253 miles south of Sydney.

17.913.

Stud rams' (two-tooth) wool, by the famous aristocratic stud ram "Density," bred by W. H. Gilson, Esq., Tasmania, from 1st stud ewe.

The original Nubba stud was selected from station-bred ewes, crossed by Tasmanian rams, from Messrs. J. Gilson, D. Taylor, and, lastly, from Mr. W. H. Gilson. The wool is of medium length, with full, bold staple, of soft, silky, pliable fibre, which is evenly serrated, dense, and very bright.

Six samples of wool, twelve months' growth, from stud ewes bred by Messrs. F. and A. Cox, Oakfield, Mudgee, about 190 miles north-west of Sydney.

17.949.

Wool grown at Wallangra, Mudgee, pure Brumbee blood: ranging in natural grass paddocks; never housed or fed.

No. 1. Superior wool of good length of staple; lacks density, but is very fine in fibre, well serrated, soft, pliable, elastic, with little top. Spinning quality, 60s.

No. 2. Wool of fine quality, staple medium length, full, deeply serrated, and elastic. Spinning quality, 60s.

No. 3. Is a little blonder and *looser* in staple, of fair length, with clear and even serration all through. Spinning quality, 60s.

No. 4. Little longer in staple; of well-serrated elastic fibre, with heavy top, giving much wool. Spinning quality, 60s.

No. 5. Much longer staple; of even serration; has a rather springy appearance; little coarser than the preceding. Spinning quality, 62s.

No. 6. Rather short in staple, which is lanky, and has waxy top. Spinning quality, 60s.

The value of this wool in bulk is 12s per lb. I am of opinion that a marked improvement would be made in this wool if a little more density were infused. The wool has a tendency to speckles and lightness. It is well adapted for hosiery yarns for fancy goods.

Nine samples of wool from stud flock of Messrs. W. and T. C. Dickson, Yarrawin, Brewarrina, 527 miles north-west of Sydney.

5,556.

These wools are of a very useful style, and for western wools have much to commend them, especially considering the circumstances under which they are grown,—the sheep being much exposed to heat, dust, and to running in large paddocks, which give the wool a fuzzy, loose, open tip.

This class of wool is suited to this climate, and great judgment has been shown in growing a wool of medium quality and good length, instead of a fine delicate stamp, which is much affected by climate and not suitable for that part of the Colony.

No. 1. Wool of five-year old ram; of combing length, finely serrated, bright, pliable; staple affected by heat; has much fuzziness and waste running too far down the staple, therefore giving much noil.

No. 2. From four-tooth ram; twelve months' growth; is a much stronger, bolder combing wool than No. 1, and better able to resist the effects of heat and dust; is more suited to the district than No. 1; is of medium quality and good length; serration pliable and dense; the heat has not injured the top of the staple as in No. 1.

No. 3. Hogget ram's wool; combing; inclined to fineness; of medium length, soft, finely serrated, but carrying much more open fuzzy tip, which will yield much noil, and does not stand the climate like No. 2.

No. 4. A long combing wool from stud ewe; eleven months' growth; of medium quality, with clear, bright staple, which is soft, pliable, dense, and with little tip; a very desirable stamp of wool. Spinning quality, 64s.

No. 5. From eight-tooth ewe; twelve months' growth; very long staple of lustrous, deeply serrated pliable wool; good quality for length, rather rough on tip. Spinning quality, 60s.

No. 6. Combing wool from four-tooth ewe, with nice length and quality; bright, dense, evenly serrated, with open top. Spinning quality, 64s.

No. 7. A dense, fine combing wool from four-tooth ewe; twelve months' growth; very soft, bright, pliable; much waste on tip. Spinning quality, 64s.

No. 8. Wool from hogget ewe; a bold long combing, with lustrous, clear, and distinct serration; wild coarse hair on extreme end of tip. Spinning quality, 60s.

No. 9. Hogget's wool, of well grown, long combing style; is bright, soft, and with very fuzzy tip. Spinning quality, 58s.

The Yarrawin style of wool is used in the combing or worsted trade for making a medium class of merino fabrics, including coatings, being long, bright, free and sound. Value, 9½d. per lb.

Thirty-two samples from Messrs. Dangar Bros., Gostwyck, Uralla, New England, 320 miles from Sydney.

18,000-31.

As commercial wools, these specimens stand in the front rank, and have much to recommend them for various manufacturing purposes—for combing or worsted fabrics requiring length, soundness, lustre,

elasticity, and purity of fibre; for hosiery goods, requiring softness, pliability, and brightness; for clothing materials, requiring fineness, softness, with milling and felting properties; all these qualifications being contained in this wool.

No. 1. A very superior wool, from hogget; will comb, but better adapted for hosiery; the staple rather short, but with fineness, softness, pliability, lustre, and purity of fibre, which would satisfy the most exacting user. If combed, it would spin to 82s.

No. 2. Is a little longer in staple, fuller, with little tip; a sort lower than No. 1, and as a hosiery wool for white or dyed goods is valuable. If combed; will spin to 80s.

No. 3. Takes much after No. 2, with pointed tip; sound all through. Spinning quality, 80s.

No. 4. A little longer in staple; not so fine as the preceding; has a beautiful lustre, with serration of great fineness. Spinning quality, 78s.

No. 5. A combing wool of nice length, with well developed plump staple, evenly serrated, bright, in light condition. For making high-class cashmeres and merino dress goods it cannot be surpassed; would dye the most delicate shades. Spinning quality, 76s.

No. 6. Much bolder staple of wool; long, clear, bright, lustrous, with very distinct serration; a very fine combing wool. Spinning quality, 76s.

No. 7. Shorter staple than previous sample; a sort lower; soft, kind handling, deeply serrated, little more tip or waste. Spinning quality, 71s.

No. 8. Bright lustrous combing wool, with very even, free, well serrated staple; little noil. Spinning quality, 71s.

No. 9. A bold grown combing wool, lower in quality; has a kind feel, and possesses lustre and pliability. Spinning quality, 60s.

No. 10. Well grown, stylish combing, beautifully serrated and bright. Spinning quality, 60s.

No. 11. Combing wool, of good length and serration; soft, bright; little wasty tip. Spinning quality, 60s.

No. 12. Bitch or breech wool (*i.e.*, the lowest part of the fleece growing on hind part of sheep); from No. 4 on comparison, shows great contrast in formation of staple length, these being bold, broad, sound, with distinct serration; the result of careful breeding. Spinning quality, 54s; value, 8d. per lb.

No. 13. Breech, from No. 6, much longer, bolder than last sample, with wasty tip; will comb. Spinning quality, 50s.; value, 7½d.

No. 14. Bulky, broad top breech piece from No. 8; will comb; used for low class of worsted goods. Spinning quality, 46s.; value, 6½d.

No. 15. Breech, from No. 1; very wasty; used for coarse hosiery goods. Value, 6d. per lb.

No. 16. A most beautiful combing wool from ewes, and, as a specimen of a commercial merino, is as near perfection as possible from a manufacturing point of view; a good even length of staple, which is full, bold, of good quality, silky, very regularly serrated, free, and of splendid lustre; would yield its full weight in "top;" extremely light in condition which is a great consideration with users; can be made into the best class of dress goods for ladies' wear, and dyed in the most delicate shades; it is perfectly adapted for a hosiery wool. If a few bales of wool similar to this sample could be put on the market, a fancy price would be obtained. Spinning quality, 76s.

No. 17. From same flock as No. 16, but a great contrast, although placed second in ewes; the staple is much shorter and thinner (fully 50 per cent.), lower in quality, but even in serration, with brightness; is sound, giving little noil. Spinning quality, 70s.

No. 18. A longer-stapled wool, full of character, nicely serrated, very elastic, fuller in staple than No. 17, with less noil. Spinning quality, 70s.

No. 19. Similar to No. 18, giving a little more noil. Spinning quality, 70s.

No. 20. A stylish specimen, very even in length and serration; will yield good weight in top. Spinning quality, 70s.

No. 21. Giving more noil than No. 20; a little heavier in tip and condition. Spinning quality, 70s.

No. 22. Much bolder, longer, stronger wool than the preceding specimens, with bright silvery lustre, and evenly serrated; rather wasty tip; a very useful wool for the fine worsted trade. Spinning quality, 66s.

No. 23. Little heavier in condition and less noil than previous sample; a free, sound wool. Spinning quality, 66s.

No. 24. Little stronger, bolder specimen; good length, rather heavy in condition; a useful wool for worsted coatings. Spinning quality, 64s.

No. 25. Nice lustrous, bold style of wool, with full staple and little noil. Spinning quality, 64s.

No. 26. Much lighter stamp of wool than No. 25; thinner in staple, good lustre, even serration, very light in condition; will produce a little noil. Spinning quality, 64s.

No. 27. Type very similar to No. 26. Spinning quality, 64s.

No. 28. Showing much lower quality as a body wool than any previous sample in this collection from the same flock; bold and full-woolled staple; light in condition; used in making medium worsted goods. Spinning quality, 60s.

No. 29. Much different style of wool to No. 28; lighter, thinner in staple, open, fuzzy, but evenly serrated; yielding much noil. Spinning quality, 58s.

No. 30. Breech wool from No. 25; good length, bright. Spinning quality, 52s.

No. 31. Breech from No. 26; lofty style; sort lower. Spinning quality, 52s.

No. 32. Breech from No. 24; a fair specimen of low merino wool, an unusual length, full staple; handles a little hard; can be used in mixing with the best or finest classes of English wools in making strong worsted goods. Spinning quality, 50s. The market value of this wool in bulk is 1s. 2d. per lb.

Eighteen samples of wool from H. C. White, Esq., Havilah, Mudgee, 190 miles north-west of Sydney; bred by exhibitor from pure Australian merino sheep.

17,915.

The Havilah flock was founded by the late N. P. Bayly, Esq., and kept pure by him for upwards of forty years. As a manufacturing wool this clip holds a high position, and may be compared with the

best in the New South Wales collection. The wool all through is well grown and bold, with beautiful lustre, silky softness, and fine fibre. May be used in the combing or worsted trade, for merino or cashmere dress goods; also the most delicate hosiery yarns for either white or dyed goods.

17,914.

No. 1. As a specimen of black merino wool, this is probably the most valuable and perfect specimen exhibited either in or out of the Colonies. Is of good length, well serrated, very pliable, soft, free from white fibres, which greatly enhances its value, since a pure black wool is very rare. The question is frequently asked, "Why does black wool often realize a better price than white wools from the same flocks?" The reason is: Firstly, the monks belonging to some of the monasteries on the Continent of Europe, at certain religious festivals, use a certain colour of cloth, which can only be made from black wool, which makes up into a brown, or what the home manufacturers call "self-grey." Secondly, black wool is being largely recommended by some medical men, of whom Dr. Jaeger, of Stuttgart, is the leader, who require a cloth as pure as it is possible to get without dyes. From the colour, this is greatly prized, and called "sanitary cloth." If any wool-grower has a quantity of black wool I would advise him to have the wool carefully gone over, making one sort as free as possible from white fibre. This will handsomely repay any extra expense incurred. Value of this sample, in grease, is 1s. 10d. per lb.

No. 2. A very high class combing wool from hoggets; an illustration of the perfection to which merino flock wool can be brought, being of high character, evenness of length, free, lustrous, of regular serration, elastic, soft, and silky. The best recommendation to users is that it will yield nearly its full weight in "top" when combed, therefore giving little or no noil—a great consideration. For best of dress goods (ladies') or hosiery, it is valuable; will take the most delicate dye. Spinning quality, 78s.

No. 3. Very similar to No. 2; not so bold in staple. Spinning quality, 78s.

No. 4. This style is different to the two previous samples, thinner in staple, and with much broader serration, but equal in length; very bright, light in condition, with a little more tip. Spinning quality, 78s.

No. 5. A bold, bulky, free, fine, wool, of nice length, giving little noil. Spinning quality, 78s.

No. 6. Sort lower than No. 5, with good proportioned staple of sound, bright, soft wool. Spinning quality, 76s.

No. 7. Much similar to No. 6, having a broader mushy top. Spinning quality, 76s.

No. 8. Good, bulky, free, bright, light-conditioned combing; very regular in serration. Spinning quality, 76s.

No. 9. Bulky combing, with even full staple; will give good weight in "top." Spinning quality, 74s.

No. 10. Bright, lengthy combing, finely serrated, soft, and pliable. Spinning quality, 74s.

No. 11. Rather stringy, thin in staple, lacking density, but sound and bright. Spinning quality, 72s.

No. 12. Combing wool from ewes; very lofty, full, bright wool; also a good hosiery wool. If combed will spin to 72s.

No. 13. A very long sound combing, of fine fibre all through the staple. Spinning quality, 70s.

No. 14. Little lower than No. 13; not so bulky in staple, and rougher tip. Spinning quality, 68s.

No. 15. Very bold sample of combing, of great length, rather rough top, giving much noil; is used in making medium worsted goods. Spinning quality, 62s.

No. 16. A well-grown bulky combing wool, bold, full in staple, bright, soft; very light tip. Spinning quality, 60s.

No. 17. Much after same type as No. 16, but a sort lower. Spinning quality, 58s.

No. 18. This represents the lowest quality amongst these samples; is a very bold, strong, broad staple from top to bottom, very regularly serrated, pliable. Spinning quality, 56s.; value in bulk, 1s. 1d. per lb.

Four samples of wool from J. F. and H. White, Bell-trees, Scone, 167 miles north of Sydney.

17,156.

Wether and hogget wool, bred from station flock ewes by Havilah rams, and, as a commercial wool, is equal to any in New South Wales; splendid for the best class of ladies' dress goods.

No. 1. Very fine, medium in length, with soft, kind, full feel; pliable, sound all through. Spinning quality, 64s.; value, 1s. 1d. per lb.

No. 2. Wethers' wool, of good length, bright, clear, sound, and full bold staple; elastic and evenly serrated. Spinning quality, 60s.; value, 11d. per lb.

No. 3. Long combing, from hogget; fibre of very superior quality; is free, clear, lustrous, sound, with silky touch and pliability. Spinning quality, 76s.

No. 4. Little shorter in staple, of medium combing length; from hogget, equal in fineness to No. 3, and in other properties to that sample. Spinning quality, 76s.; value of hogget wool, 14½d. to 15d. per lb.

Eighteen samples of wool from F. W. Hume, Esq., Tarengo, Burrowa, 225 miles south-west of Sydney.

17,929.

The six samples of rams' wool are from sheep by a stud ram bred by David Taylor, Esq., St. Johnstone, Tasmania, and fed on natural grasses only.

No. 1. Fine combing, of medium length, well serrated, rather thin, in heavy condition, with broad topped staple; is very wavy; will give rather too much noil for the class of wool.

No. 2. Very nice combing wool, bright, lustrous; a decided improvement on No. 1 in reference to wasty tip or noil.

No. 3. Good, bright, combing sort, heavy yolky top; will give good proportion of combing—that is, top or sliver.

No. 4. Slightly lower in quality than the former, but a fair class of combing; full in staple, finely serrated, not much noil.

No. 5. A longer, bolder style than last sample; not so much quality; is a useful combing wool.

No. 6. Very similar to No. 5; well serrated; kind soft feel.

No. 7. Ewes' combing wool, grown at Tarengo, bred from the celebrated Havilah sheep, crossed with a ram bred by D. Taylor, Esq., Tasmania; growth, 400 days. This wool retains all the characteristics of the well known Mudgee blood, and will very favourably compare with most wools for using purposes, being of nice length, fine in quality, regularly serrated, and when combed will yield its full weight in sliver. Useful in making high-class merino dress goods, cashmere fabrics, &c. The ewes' wool from this flock shows to better advantage than the rams'. Spinning quality, 74s.

No. 8. Very bright specimen of even length, free, light-conditioned, finely serrated, pliable, with very full or lofty appearance; is a valuable hosiery wool. Spinning quality, 72s.

No. 9. Much after No. 8, bolder in staple, little more wasty tip. Spinning quality, 72s.

No. 10. A longer, stronger combing; bold staple, well serrated, light, bright, very even. Spinning quality, 70s.

No. 11. Combing wool, bold, and well grown; beautiful wavy staple. Spinning quality, 66s.

No. 12. Bulky, well-proportioned staple, bright, elastic, evenly serrated, light in condition. Spinning quality, 62s.; value, 11d.

Nos. 13, 14, 15, 16, 17, 18. These hogget wools are of medium length, with regular serration, heavy in condition; have a decided tendency to toppiness; will waste much in noil, and do not compare favourably with the ewes' wool from this station. These specimens have some openness and thinness, being not by any means dense or sound. Should be more valuable to manufacturers than ewes' wool; but they are lower in grade, probably because they have been much exposed to wet. Spinning quality, 60s.; value, 9d.

Two specimens of wool from H. R. F. Hume, Esq.,
Everton, Burrowa, 225 miles south of Sydney.

17,935.

Wool from aged ewes rearing lambs, bred on station previous to 1865, from imported Saxon merino rams, subsequently from rams purchased from N. P. Bayly, Esq., of Havilah, Mudgee, which bear all the character of that valuable strain. As a hosiery wool this is most valuable.

No. 1 (19.) A fine, soft, kind, handling wool, and as aged ewe's wool is desirable, is of medium length, very finely serrated, with good milling properties; could be used in the cloth trade.

No. 2 (20.) Much longer, with broad serration; is strong, sound, lower in quality, with thin open staple.

Three samples of combing wool from B. Haydon, Esq.,
Bloomfield, 188 miles north of Sydney; growth,
363 days.

18,056.

The sheep are descendants of the Camden stud.

No. 1. A type of wool which will compare favourably with any wool of its class from any other part of New South Wales, having good

length of staple, free, full, even to tip, distinctly and regularly serrated, soft, and elastic. Spinning quality, 68s.

No. 2. Rather lower in quality, but long, soft, pliable. Spinning quality, 66s.

No. 3. A little thinner in staple; in other respects same as others. Value in bulk, 11½d.; spinning quality, 62s.

Thirty-one samples of wool from Eunonyharcenyha, Wagga Wagga, 309 miles from Sydney, New South Wales. (The property of the Australian Mortgage, Land, and Finance Co.)

17,955-8.

Nos. 1, 2, 3, and 4. Rams' wool, from descendants of "Russell's," Barunah Plains, Victoria; Tasmanian and Green's rams being used. Have much quality, with nice length, density, lustre, elasticity, and are finely serrated.

17,959-66.

Nos. 5, 6, 7, 8, 9, 10, 11, 12. Wool from stud ewes; are very similar in length, quality, condition (which is very light), and in general appearance all through; they are of nice even length, and differ only in serration. Nos. 7 and 9 are much deeper; the wool is clear, bright, pliable, with silky touch. Spinning quality, 74s.

17,966a-73.

Nos. 13, 14, 15, 16, 17, 18, 19, 20. Wool from stud ewes with lambs. In comparing wool from dry ewes (without lambs) and ewes with lambs, there is a marked difference. The dry ewes give a bolder, bulkier-looking wool, the staple generally plump, full, with softer, kinder handling. The wool invariably fetches from 1d. to 2d. per lb. more than wool from ewes with lambs, which shows a thinner staple, more openness and fuzziness, with tendency to hardness and dryness, and in manufacturing requires a little assistance from a more yolky or better matured wool. The remarks apply to the above numbers. These wools are specially adapted for fine hosiery fancy goods.

17,974-7.

Nos. 21, 22, 23, 24. Hoggets, offspring from above. A beautiful silky wool, possessing splendid spinning qualities. Rather weak in staple, which is of good length; but this is the fault of feeding and not of breeding. As a commercial wool, this leaves nothing to be desired, and few clips will realize more in the market. Present value, 12½d. Will spin to 80s. Great attention appears to have been taken in the culling of this flock, and with the most favourable results.

17,978-82.

Nos. 25, 26, 27, 28, 29. Good combing, from wethers, bold in staple, full, distinct in serration; will yield good weight in "top." Spinning quality, 68s. The above specimens are specially suited to the hosiery trade and light merino dress goods. Value, from 10½d. to 11d. per lb.

17,983-4.

Nos. 30 and 31. Very superior lambs'; bright, soft; used in making light garments for underwear.

Seven samples of ewes' wool (two years and upwards), 180 days' growth, presented by Alexander Sloane, Esq., Mulwala Station, Mulwala, Riverina, 427 miles from Sydney.

18,332-6.

The flock is descended from some of the purest merino blood in the Colonies, *e.g.*, from the flocks of Messrs. E. K. Cox, Mudgee, New South Wales; Sir Samuel Wilson, Ereildoune, Victoria; and Messrs. W. Gibson & Son, Seone, Tasmania.

No. 1. A fine combing, of good length— $4\frac{1}{2}$ inches—which is an extraordinary length, considering it is of only 180 days' growth; is above the average length of merino wools, and sufficiently long for any worsted combing purposes, and a desirable wool in every respect; very lustrous, soft, elastic, with a beautiful, distinct, wavy, free staple, with little light tip. Spinning quality, 66s.

No. 2. Same type of combing, with smaller serration; not so soft, but very close-woolled. Spinning quality, 64s.

No. 3. A bold broad-stapled combing, of good length; very pliable, free, and of nice lustre; slight, wasty tip. Spinning quality, 64s.

No. 4. Combing, inclined to deep-grown, with long, bright staple, and kind, soft touch; little wasty tip. Spinning quality, 58s.

No. 5. Long, lustrous staple of clear wool; is very close, compact, well-serrated, and elastic. Spinning quality, 58s.

No. 6. Bold, lustrous wool; staple, long and full; very soft and pliable. Spinning quality, 58s.

No. 7. Showing breech from No. 5; is very well grown, with bulky, well-defined, plump staple, giving a wasty tip. Spinning quality, 44s.; value in bulk, 11½d. per lb.

Sixteen samples from C. Featherstonhaugh, Esq., Goorianawa, Mundooran, 238 miles from Sydney (through Mr. J. Briggs).

17,735a.

Flock ewes' wool, about three years old, paddocked, grass fed; descended from the celebrated Mudgee blood, and has much to recommend it as a good, useful, using, combing wool; used mostly in Bradford, Yorkshire, for worsted purposes of various qualities from strong to fine.

No. 1. Combing wool from six-tooth ewe, well-grown, with distinct serration; very elastic, soft, little tip. Spinning quality, 60s.

No. 2. A bulky, full-stapled wool; bright and pliable. Spinning quality, 60s.

No. 3. Very free, bold combing; good length and fair type of wool for worsted; evenly serrated; little tip. Spinning quality, 58s.

No. 4. Much thinner in staple than No. 3; fair length; nicely serrated all through. Spinning quality, 58s.

No. 5. Bold and well-proportioned combing; long, clear, bright, and pliable; little wasty tip. Spinning quality, 56s.

No. 6. Free, sound wool, of medium length; even staple all through; deep serration. Spinning quality, 56s.

No. 7. Sort lower than No. 6, with bold, long staple; even, free soft. Spinning quality, 56s.

No. 8. Very free, sound combing, not so long as No. 7; deeper serration, elastic, and lustrous. Spinning quality, 56s.

17,735b.

No. 9. Soft, kind combing, of good length; distinct serration, pliable; open and fuzzy tip; will give much noil. Spinning quality, 54s.

No. 10. Combing free, long, with full, bold staple; heavy serration; bright, with rather hard tip. Spinning quality, 54s.

No. 11. A light-conditioned wool all through; medium length of staple; bold, free, soft, and pliable. Spinning quality, 54s.

No. 12. Combing wool of a long, bright stamp, with softness and brightness; heavy wasty tip. Spinning quality, 52s.

No. 13. Long, strong, bold, well-grown combing, with even serration; bright, rather tippy. Spinning quality, 50s.

17,735c.

No. 14. Deep, strong wool, with length; much wasty tip. Spinning quality, 48s.

No. 15. Bold, full wool; long, very wild, fuzzy tip, giving much noil. Spinning quality, 46s.

No. 16. Breech or lowest part of fleece; is open and loose, with much wasty tip. Spinning quality, 44s.

The Goorianawa wool, from its very varied qualities, requires very careful classing to realize its full value. Value in bulk, 10½d. to 11d. per lb.

Two samples (fleeces) of hogget wool from Messrs. Kater Bros., Mumblebone, near Warren, 353 miles W. of Sydney (through Mr. C. Mallinson).

13,295.

These wools are especially adapted for the worsted trade, and are a useful style to grow in that district, being a medium, inclined to strong wool, giving good weights, and a better paying product than any fine wool that could be grown in that part of the Colony.

No. 1. From ewe hogget, which is on the strong or deep-grown side; it is a very bold, long, free-combing, fine for the great length, bright, and lustrous; very elastic, with even and deep serration; light on tip. Spinning quality, 58s.

No. 2. Wether hogget's wool, of good length; does not show to the same advantage as the ewe's wool, being coarser, not so compact in staple, or bright; is soft and pliable. Spinning quality, 56s.

This style of wool is selling readily at about 10d. per lb.

Two samples (fleeces) stud ewes from T. L. Richardson, Esq., Murrawombie, Duck Creek, Cannonbar, 330 miles north-west of Sydney.

10,812.

No. 1. Bright deep-grown combing, of great length and weight, very free, sound, pliable, nice lustre, distinct serration; will yield well in sliver or top, and used in making medium lustre goods, and much prized in the worsted trade. Spinning quality, 56s.; value, 9½d. to 10d. per lb.

No. 2. Clothing wool from stud ewe; is a very fine small wool, bulky, soft, kind, with small serration; has great felting and milling properties; much required in making the finest of broad-cloth, billiard-cloths, &c. Value, 5d. per lb.

Five fleeces from J. K. Clark, Esq., Ghoolendaadi, near Boggabri, 548 miles north from Sydney (through Mr. P. L. Lee).

14,318.

No. 1. Fleece from ram, of medium combing, with good length of bold well-defined staple; well serrated; a weighty wool; condition light, with lustre.

No. 2. Ram's wool; much longer and stronger than No. 1, but bright, pliable, and with rather fuzzy tip.

No. 3. A fine wool from ewe; of medium length, full, bold, soft, pliable, bright, silky; is a creditable specimen from that part of the country; as a hosiery wool it is most useful. If combed, will spin to 68s.

No. 4. Ewe's wool; very similar to No. 3, only giving much more wasty tip; a sort lower in quality, viz., 66s.

No. 5. Very free, sound, useful combing, of good length; nicely serrated, with wasty tip. Spinning quality, 62s.

Value of last three samples, 10d. per lb.

One sample of clothing wool from Nangus Station, Gundagai, 251 miles south-west of Sydney.

14,823.

A very superior clothing; is lofty, bold, sound, finely serrated, and soft; is used in the fine-cloth trade. Value, 9d.

One specimen from near Young, 249 miles south-west of Sydney.

14,824.

Is of superior quality; finely serrated, but what is termed a wasty wool. Value, 8d.

One sample from Bulga Station, Cobar, 550 miles west of Sydney.

14,825.

A hogget clothing wool, with rather fuzzy open tip; of fair quality; evidently grown on red sandy soil; used for dyed clothing goods. Value, 7d.

Nine samples of wool from H. Webb, Esq., Baden Park, Wilcannia, 583 miles north-west by west of Sydney.

18,210.

No. 1. Fine carding wool (ewes'), with bold full staple; bright, finely serrated, and soft.

No. 2. Ewe's wool, much longer, of medium quality; wild open top; will give much noil. Spinning quality, 60s.

No. 3. Ewe's wool; thin stapled wool, of medium length; fair quality; a hosiery wool.

No. 4. Medium combing length, bright, and free; has wasty tip; from ewe. Spinning quality, 58s.

18,214-18.

No. 5. Combing ewe's wool; much lower than previous samples; broadly serrated. Spinning quality, 54s.

Nos. 6, 7, 8, and 9. Combing wool from hoggets, showing great improvement, good length, free, bold, evenly serrated, bright, with wild and fuzzy top. Spinning quality, 62s.; value in bulk, 8d.

These wools are grown in red sandy country, much exposed, thus accounting for the broad open fuzzy top.

Three samples of hoggets' wool (fleeces), washed in hot water, from Messrs. Shanahan & Jennings' Garrawella Station, Coonabarabran, Liverpool Plains, 368 miles north-west of Sydney.

17,182.

No. 1. Very superior carding washed wool, with even full staple; of fine, sound, free fibre, which is finely serrated and pliable; a useful hosiery or clothing wool for dyed goods.

17,192.

No. 2. A loftier, softer carding sort than No. 1, being a little brighter; used for the same purpose as No. 1.

No. 3. Very superior combing wool, with bold full staple; of nice length, and fair colour; soft, elastic, very finely serrated. Spinning quality, 70s.; value in bulk, 1s. 6d. per lb.

17,192a.

No. 4. Wether hogget's wool, twelve months' growth; a much bolder style than any other specimen from this station; is of a medium length, dense, with nice quality; very sound, free, and finely serrated; will comb. Spinning quality, 66s.

Three specimens of scoured wools from Mr. J. R. Chappel; Wool-scouring Works, Dundee, New England, 373 miles north-north-west of Sydney.

18,053.

No. 1. Very fine clothing wool, of a lofty bulky sort; of splendid colour, with soft kind touch, and pliancy; has great felting properties; used in making the finest cloth. Value, 1s. 7d. per lb.

No. 2. Was shown at the Centennial Agricultural Show, Sydney, January, 1888; evidently from the same pile of wool.

No. 3. First prize wool at the late Centennial Show, for fellmongered wool. A small clothing wool of fine quality, soft, lofty, clean, and bright; a credit to the firm which got it up. Value, 1s. 6d. per lb.

Skin wools are used for mixing with other wools required for felting purposes, and it is a well known fact amongst the manufacturers that skin wool felts better than wool taken from the sheep alive. The nature of serrations has much to do with felting properties, and it is argued that death causes the scales (serrations) to be less firmly attached to the shaft of the fibre, thus increasing the felting property.

Small collection of wool in grease, sorted into qualities ready for manufacturing; also same sorts scoured. Sorted and scoured by A. Hawkesworth, Sydney, N.S.W.

No. 1. Superfine, first, and second clothing, in grease.

No. 2. Superfine, first, and second clothing, scoured.

No. 3. Superfine, first, and second combing, in grease.

No. 4. Superfine, first, and second combing, scoured.

18,175.

One sample of cross-bred skin wool (Leicester and Merino), used in the manufacture of carpets and rugs; from New South Wales, but station uncertain. (Presented by the New Zealand Loan and Mercantile Agency Co., Limited, Sydney, through Mr. Wright.)

The undermentioned specimens were taken from a collection of wools shown at the Colonial and Indian Exhibition, London, 1886. The samples are too small for valuation, or to afford a correct estimate of their suitability for manufacturing purposes. Three hundred samples were received from London. Each sample is placed with the wools of the Colony in which it was grown.

17,140, 17,164.

Two samples of rams' wool from J. Penzer, Esq., Yarrandale Station, Dubbo, 226 miles from Sydney.

No. 1. Is the finest fibred wool in that collection; apparently of Silesian or Saxon descent; it is very fine, clear, finely serrated, of medium length, silky, bright; the staple is inclined to thinness, otherwise it would be hard to find its superior.

No. 2. Much longer in staple; not so fine; heavy in condition, but is of a useful stamp; the staple is bold, well grown, with brightness and softness; is pliable and boldly serrated.

Two specimens from the Peel River Co. (Limited),
Goonoo Goonoo, 251 miles north of Sydney.

17,146.

The origin of this celebrated flock dates back to 1825, when a very bold start was made by importing 700 pure merino sheep from Saxony (Electoral Flock), France, and England (Spanish blood). Afterwards, a large number of ewes from Camden (also of Spanish descent) were introduced. This combination of blood, which had become thoroughly acclimatized, and showed great improvement in wool and body, was called pure Australian merino. In 1885, there were further importations from Germany, both of rams and ewes, and for ten years after the Negretti was introduced. Special care was now taken to preserve the original type, and any sheep showing signs of reverting to the short German wool were taken out. Latterly, rams from Collaroy, Erildoune, Havilah, and Tasmania have been used.

No. 3. Ram's wool; long, bold, bulky, bright, finely serrated, elastic, with soft kind feel, and possessing density.

No. 4. A very lustrous wool from ram; of nice length, silky, and pliable; full of sound, fine fibre to tip.

Two specimens of rams' wool from J. G. Mulholland,
Esq., Oura Station, Wagga Wagga, 300 miles south
of Sydney.

17,154.

No. 5. Most beautiful and perfect type of merino combing wool; the staple is long, very full, bold to tip; has a magnificent pure, clear, silky, bright, lustrous fibre, finely serrated, very elastic, and most certainly there is not a superior type of merino wool in this Museum. I am informed by a friend of Dr. Bowman, the wool expert at the Colonial and Indian Exhibition, 1886, that the fleece from which this sample was taken was a most valuable specimen, and left nothing to be desired.

17,154a.

No. 6. Ram's wool, showing great contrast to No. 1; short, thin, inclined to fuzziness, and wasty; its only recommendation is its fineness.

One sample of ram's wool from H. C. White, Esq.,
Havilah. (See Commercial wools, p. 11).

17,156.

This is a nice type of ram's wool; is long, with good quality; very bold and dense; has a silky feel; is very elastic, finely serrated, and lustrous.

Two samples of wool from T. W. Hammond, Esq., Old Junee, 290 miles from Sydney.

17,148.

No. 8. Very fine ewe hogget's wool; medium length of clear bright wool; soft and kind to handle.

17,161.

No. 9. Breech wool from No. 8; is a lofty bold specimen.

Two samples from stud rams, Jas. Lee, Esq., Larras Lake, Molong, 172 miles from Sydney.

17,149.

No. 10. Fine delicate combing; medium length; soft, finely serrated, but wanting in density.

No. 11. Much bolder, and more desirable wool; nice length; fine in quality; full staple, dense, soft, silky, very finely serrated, and elastic.

Three samples from the late Honorable James Chisholm, M.L.C., Kippilaw, Goulburn, 134 miles from Sydney.

17,145.

The Kippilaw sheep are descendants of real aristocratic blood, and very probably these specimens do not fairly represent the stamp of wool one would expect from such high parentage. The wool is of an open, loose type, little thick in the fibre.

The flock was founded about forty years ago by importing ewes from Germany, their progeny crossed with Havilah and E. K. Cox's rams; their offspring re-crossed with Tasmanian rams (Gibson's); the result was again crossed with Parramore rams (Tasmania.)

The wool sold at close of Colonial and Indian Exhibition, 11d., unskirted. The hoggets' wool netted 7s. 3½d. per fleece all round.

Nos. 12 and 13. Hogget ram's wool, of medium length, bulky, light, bright, with good fulling properties; rather wild, hairy tips; will waste much.

17,158.

No. 14. A medium quality of carding wool; little longer than previous samples, with open, fuzzy staple; soft and bright. It would be used as a hosiery wool for medium yarns.

One sample of ewe hogget wool, from Collaroy Co. (Limited), Merriwa, 198 miles north of Sydney.

17,147.

No. 15. The Collaroy sheep are descendants from Saxon, Sturgeon, and Rambouillet imported, and constitute what is called Collaroy blood, which stands high as a breed. This single specimen is of good length and quality; well proportioned staple all through; evenly serrated and pliable, with bright lustre; it is a good specimen of combing wool.

One specimen from J. M. L. Macdonald, Esq., Wallabadah, 226 miles north of Sydney.

17,155.

No. 16. A very deep-grown strong combing wool, taking much after the "Canowie" breed; of fair good length; even staple; bright, lustrous, with broad serration.

One sample, labelled "Cowabre, Coolma" (probably Coolah), 246 miles north-west of Sydney.

17,160.

No. 17. A soft, kind wool; fine, with evenly serrated staple; rather thin, light, and with decidedly fuzzy top; used in the fine hosiery and cloth trade.

Three samples of wool from Messrs. Dangar and M'Donald Brothers, Wantabadgery, Wagga Wagga, 309 miles south of Sydney.

17,141.

No. 18. A very superior combing; of great length; fine in fibre and serration; bright, elastic, silky, sound, free; is rather thin in staple.

No. 19. A bold, soft, bright, hogget combing wool; lustrous, pliable, and dense; not so fine in fibre as No. 1.

No. 20. Much stronger and deeper style of combing; bulky, lofty, with nice lustre; kind, and full to handle; will give a little too much noil.

Two specimens of combing. Hon. W. Wilson, Gooramble, Corowa, 406 miles south of Sydney.

17,139.

No. 21. A very deep-grown merino wool; light, lustrous, with broad, bold staple to tip; broadly serrated; very light in condition; will yield full weight in "top."

No. 22. Fine cross-bred; evidently Leicester and merino; very long, lustrous, silky, soft, and pliable; is a really fine specimen.

Four specimens from A. Sloane, Esq., Mulwala Station, 427 miles south of Sydney.

17,153.

The Mulwala flock is descended from sheep purchased from Messrs. E. K. Cox, Mudgee; Sir S. Wilson, Ercildoune, Victoria; and Messrs. W. Gibson & Son, Scone, Tasmania, and as a combination of blue blood it would be difficult to find a superior. In my opinion these specimens do not fairly represent the Mulwala wool.

No. 23. A long, bright, bold, fine combing, with small serration, silky, and kind to the touch, but a noily tip. This sample stands far in front of the others.

17,153.

No. 24. Much shorter ; very fine, with small serration and brightness, inclined to fuzziness, with open, wasty top ; will waste much.

17,143.

No. 25. Little longer than No. 2 ; is decidedly curly and fuzzy, with wasty tip ; of fair quality, soft, and good colour.

17,162.

No. 26. Very bold wool, of good length ; much lower in quality than previous specimens ; open, fuzzy, with soft, kind, full touch ; very wasty staple, but bright.

Two samples from E. B. Woodhouse, Esq., Mt. Gilead, Campbelltown, 34 miles south-west of Sydney.

17,142.

No. 27. Combing from Romney Marsh sheep, originally from Kent, England, and classed with the Lustre family. This sample is decidedly too short, also devoid of that silvery brightness so well appreciated in this class of wool ; it is too open and fuzzy. I should certainly term it a cross-bred, and call it a "demi-lustre."

17,152.

No. 28. Is evidently "breecb" from No. 1, showing the contrast.

Two scoured samples of wool from Messrs. Gibson & Co., "Union" Wool-scouring Works, Bourke, 503 miles north-west of Sydney.

17,157.

No. 29. Combing wool, showing an excellence in scouring which is highly commendable ; very pure white ; bulky, lustrous, soft, without any stringy or ropy appearance.

No. 30. Clothing wool ; very lofty, full, bold, soft to handle but not showing the bright lustre of No. 1.

B.—1888 Clip.

Twelve samples, presented and bred by James Lee, Esq., Larras Lake, Molong, Bathurst, N.S.W.

These wools are from sheep descended from the celebrated Springfield blood. The type is easily recognized, and retains the character all through.

19,033.

No. 1. Stud ram, four-tooth ; prize-taker at Bathurst ; grass fed ; eleven months' growth ; an even, dense combing ; useful length ; lustrous, soft, kind, pliable ; fibre is sound, free, well serrated ; black tips.

19,034.

No. 2. Stud ram, two-tooth ; prize-taker at Bathurst ; grass fed ; not so long as No. 1, but little more quality ; is very close, sound ; in rich, yolky condition.

19,035.

No. 3. Stud ram, two-tooth ; grass fed ; a stylish combing, of good length and quality ; bright, kind handling ; staple full, even, strong ; in perfect condition, with small black tips.

19,036.

No. 4. Stud ram, eight-tooth ; grass fed ; eleven months' growth ; silky, light combing ; lengthy, fine, lustrous, dense, with slight, open, wasty top.

19,037.

No. 5. Stud ram, eight-tooth ; grass fed ; eleven months' growth ; useful, dense combing, of superior quality ; faultless condition.

19,038.

No. 6. Stud ram, eight-tooth ; grass fed ; eleven months' growth ; superior combing, desirable length, sound, dense, bright staple, even, pure, kind, elastic, finely serrated ; high condition.

19,039.

No. 7. Ewe, two-tooth ; grass fed ; eleven months' growth ; prizetaker ; deep-grown ; useful combing ; staple medium in length, sound, lustrous, soft, wavy, pliable, with light, open, wasty tips. Spinning quality, 80s. ; value, 12d. per lb.

19,040.

No. 8. Ewe, two-tooth ; grass-fed ; eleven months' growth ; prize-taker ; combing, of high type, having great length, with high quality ; very silky, beautifully soft to handle, dense ; staple of nice depth, finely serrated, and elastic ; in splendid condition ; rich creamy tinge all through, with small black tips. Spinning quality, 84s. ; value, 12½d. per lb.

18,041.

No. 9. Stud ewe, two-tooth ; grass fed ; eleven months' growth ; prize-taker ; well-grown combing, resembling No. 8 very much ; might be from the same sheep.

19,042.

No. 10. Ewe, two-tooth ; grass fed ; eleven months' growth , prize-taker ; showing same type of wool as No. 7 ; little lighter in condition. Spinning quality, 80 s. ; value, 12d.

19,043.

No. 11. Ewe, two-tooth ; grass fed ; eleven months' growth ; prize-taker ; specimen of short, dense, carding wool, evidently giving a good weight per fleece ; condition light ; beautifully fine. Would spin to 90s. if required ; value, 11d. per lb.

19,044.

No. 12. Ewe, two-tooth ; grass fed ; eleven months' growth ; prize-taker ; superior combing, of medium length ; bright, dense, soft ; staple free, bold, well serrated ; faultless condition, healthy, and light. Spinning quality, 96s. ; value, 12 $\frac{1}{2}$ d. per lb.

Bred and presented by F. W. Hume, Esq., Tarengo,
Burrowa, N.S.W.

In comparing these wools with the 1887 clip, I find a marked improvement. Although not longer, there is more quality, greater density and lustre ; rich in condition.

19,067.

No. 1. Hogget ram ; shorn as lamb ; entirely grass fed and unhoused ; about eleven months' growth. A superior combing, of medium length ; is very bright, sound, free, dense, kind, elastic, even in staple, beautifully serrated ; excellent, rich condition ; small black tips. As these young rams have not been used, the spinning quality is very high — 100s. ; value, 13d.

19,068.

No. 2. Hogget ram ; shorn as lamb ; entirely grass fed and unhoused ; sample not so dense as No. 1, but equal in length, lustre, pliability, fineness, and condition. Spinning quality, 100s. ; value, 13d.

19,069.

No. 3. Young ewe's wool ; eleven months' growth ; grass fed and unhoused ; superior lustrous combing ; free, soft, silky, full, bold staple of beautifully serrated fibre, pliable ; condition all that is required. Spinning 120s ; value, 13d.

Presented and bred by H. C. White, Esq., Havilah,
Mudgee.

19,123.

No. 1. Ewe's wool, six years old ; long, sound combing ; although from so old a sheep, still retains its soft, silky, wavy staple ; is very sound, free. Spinning quality, 80s. ; value, 10 $\frac{1}{2}$ d.

19,122.

No. 2. Ewe's wool ; six years old ; resembling No. 1. Is of the same quality and value.

19,121.

No. 3. Ewe's wool ; six years old ; combing, of good length and quality, lustrous, strong, kind, distinctly serrated ; in good condition ; slight, light tip. Spinning quality, 80s. ; value, 10 $\frac{3}{4}$ d.

19,120, 19,118.

No. 4 and 5. Ewes' wool; six years old; might be from the same sheep; is lengthy, silky, kind; staple deep, full, bold, and wavy, pliable, free; little noily tip; creamy, light condition. Spinning quality 76s.; value, 10d.

19,119.

No. 6. Ewe's wool; six years old; long, sound combing; soft, bright, elastic; will yield heavy in noil. Spinning quality, 70s.; value, 9d.

Presented and bred by Jas. M'Kees, Esq., Hazel Park,
Deniliquin, N.S.W.

These wools are of the deep strong class, inclined to be hard and harsh. I would recommend a cross for quality and softness.

19,022.

No. 1. Ram's wool; nine months' growth; extra deep-grown combing; very bright, sound, and free; hard to handle; has an open, wasty tip; will give much noil. Spinning quality, 50s.; value, 7 $\frac{3}{4}$ d.

19,023.

No. 2. Ram's wool; nine months' growth; strong combing; is lustrous, with nice wavy staple; little hard; very wasty, mushy tip. Spinning quality, 50s.; value, 7 $\frac{3}{4}$ d.

19,025.

No. 3. Ewe's wool; nine months' growth; combing; deep-grown, strong, bright, dense, with fuzzy, wasty top. Spinning quality, 54s.; value, 8 $\frac{1}{4}$ d.

19,026.

No. 4. Ewe's wool, nine months' growth; combing of useful length; of nice wavy staple; lustrous, sound, free, in good condition, with small black tip. Spinning quality, 54s.; value, 8 $\frac{1}{2}$ d.

19,024.

No. 5. Ewe's (hogget) wool, twelve months' growth; combing, of great length; has a very fuzzy, noily tip; hard and harsh. Spinning quality, 54s.; value, 7 $\frac{1}{2}$ d.

19,024a.

No. 6. Ewe's (hogget) wool; nine months' growth; might with safety be called cross-bred; is of great length; is sound, free, light in condition; strong, wavy staple; a useful wool in its class. Spinning quality, 40s.; value, 9d.

One sample of machine-scoured wool (clothing). C. Featherstonhaugh, Esq., Goorianawa, Mundooran, N.S.W.

18,565.

Is of excellent colour, but too much taken out ; it handles hard and dry. Value, 20d.

Six samples of two-tooth ewes, from Messrs. Scott, Gingie, Walgett ; station bred ; descendants of the celebrated Currie (Victoria), Canowie (South Australia), and Wanganella (New South Wales) blood, which produces a most useful style of wool—the former with its fine, soft, silky, lustrous, dense type, the latter favourably known as a long, deep-grown combing.

399 F to 407 F.

These classes combined form a most desirable, useful paying cross, specially adapted to the Walgett district. These wools, produced under careful management, are long and dense, which have the effect of not allowing the heat and dust, so common in that part of the country, to penetrate any distance down into the wool ; the tips becoming open, hairy, and fuzzy, prevent all impurities from settling and damaging the fleece. These wools are a credit to the grower.

If this wool were scoured by a careful, reliable tradesman, the result would show a decided increase on the credit side of the ledger than if sold in the grease. In scouring, the wasty tips disappear, to the great advantage of the grower. In the grease, the rough, open, hairy tips are an eyesore to the buyer, who makes his calculations as to how much pure sound fibres will be produced when combed, as only the perfect ones form the "top," which is alone valued ; the noily, imperfect hairs the grower has to present to the users. These remarks apply to the combing trade, for which the undermentioned are adapted.

No. 1. Nice lengthy combing ; staple sound, free, with even serrations ; is kind, pliable, even throughout ; in good condition ; little noily tips. Spinning quality, 70s. ; value, 11d. per lb.

No. 2. Very close, dense combing, of nice length ; soft, pliable ; will give much noil. Spinning quality, 70s. ; value, 10½d. per lb.

No. 3. Long, free, sound combing ; dense wavy staple ; bright ; soft to handle ; tips not so wasty as No. 2. Spinning quality, 60s. ; value, 10½d. per lb.

No. 4. Bold, close, fine, sound combing ; finely serrated ; pliable ; very wild, hairy tips. Spinning quality, 66s. ; value, 10d.

No. 5. Very attractive, showy combing, of good quality ; staple long, free, lustrous, and even ; tips noily. Spinning quality, 66s. ; value, 10d. per lb.

No. 6. Deep grown, bold stapled ; bright, sound, elastic ; mushy, wasty tips. Spinning quality, 60s. ; value, 9½d. per lb.

Ten samples from Llanillo Station, near Walgett, New South Wales, owned by Messrs. Gilchrist, Watt, & Co. (Mr. Chase, Manager).

389 F to 398 F.

These wools are much longer than the Gingie specimens, but not so dense; an introduction of Mudgee blood would have the desired effect; the fineness is suitable to the country.

No. 1. Six-tooth ewe; long, useful, free combing, of nice quality; is bright and sound; fibre clear, strong, beautifully serrated and elastic; rich in yolk, black-tipped and earthy. Spinning quality, 60s.; value, 10d.

No. 2. Six-tooth ewe; bold, deep-grown combing, with wavy and pliable staple; earthy, noily tips. Spinning quality, 60s.; value, 9½d. per lb.

No. 3. Ewe hogget; well grown, bulky combing; staple long, strong, lustrous, soft, silky; noily tips. Spinning quality, 66s.; value, 10½d. per lb.

No. 4. Ewe hogget; little shorter; good quality; handles soft and kind; very even and bright; light open tips. Spinning quality, 66s.; value, 10½d. per lb.

No. 5. Wether hogget; even, light conditioned soft combing; fibre clear, fine, crimp; very elastic; open noily tips. Spinning quality, 66s.; value, 10½d. per lb.

No. 6. Wether hogget combing, with great depth of staple; is even, bright, sound; nice even wave; kind to the touch; light, open, earthy tips; condition good. Spinning quality, 64s.; value, 10¼d. per lb.

No. 7. Four-tooth wether; soft, silky, lustrous combing, with good quality and condition; wasty, noily tips. Spinning quality, 60s.; value, 10d. per lb.

No. 8. Four-tooth wether; much shorter; is thin and light, bright, finely serrated; little noily. Spinning quality, 60s.; value, 9¼d. per lb.

No. 9. Four-tooth wether; good, useful, lengthy, soft combing; bright and elastic; wasty tips. Spinning quality, 60s.; value, 9¾d. per lb.

No. 10. Four-tooth wether; a desirable, stylish type of combing; great depth of staple; is even, lustrous, soft, silky; well supplied in rich, creamy yolk; is a good specimen of a useful, paying wool; tips earthy, noily. Spinning quality, 56s.; value, 10d. per lb.

Three Fleeces, from J. K. Clark, Esq., Ghoolendaadi Station, Boggabri, New South Wales.

No. 1. Stud ram, eleven months' growth; weight, 9 lbs.; awarded Champion Prize, District Show, 1888; a short, dense wool; staple full, bright, soft; light in condition; burry. Value, 9d. per lb.

No. 2. Four-tooth ewe, eleven months' growth; weight 9 lbs.; awarded Champion Prize, District Show, 1888; much longer than ram's wool; close, well proportioned staple; fibre fine, sound, silky, and elastic, showing high lustre; light conditioned; open noily tips, and burry. Spinning quality, 70s.; value, 10d. per lb.

No. 3. Six-tooth ewe, eleven months' growth; weight 10 lbs.; awarded a Champion Prize at a District Show, 1888; very close, medium grown wool; bright, light in condition; fibre broad, with hard feel; will give much noil. Spinning quality, 60s.; value, 9½d. per lb.

2.—VICTORIA.

A.—To 1887 Clip.

Fourteen specimens of washed and greasy wool, from the celebrated Ereildoune Estate, Burrumbeet, Victoria, 133 miles west-by-north of Melbourne; owned by Sir Samuel Wilson.

10,842, 11,350, 13,286, 13,850.

Before going into particulars of the different samples of wool, it may not be out of place to give a short history of the formation of this stud flock, particulars of which were obtained from the Sale Catalogues kindly forwarded by A. Fisker, Esq. (Messrs. Fisker, Valentine, & Co., Melbourne). The Messrs. Learmonth were the first white men to visit the district in 1837, and they were so much impressed with the nature of the soil, &c., that in 1838 they took possession of the country and stocked it with Tasmanian sheep. Lake Burrumbeet soon became dry, and, from the great quantity of vegetable matter left, was for a number of years a rich pasturage for the sheep, which showed such a marked improvement, both in body and wool, that the owners were induced to secure some pure pedigree sheep which happened to be for sale at that time.

It was in 1848 that the pure flock, the origin of the present stud flock, was obtained by Messrs. Learmonth.

These sheep were the descendants of the first great importation of Spanish merino into Germany, which had been secured in 1785 by the Elector of Saxony, as a great favour from the King of Spain, and which formed the best flock in that Kingdom. The late Mr. Forlonge obtained a portion of this celebrated breed, which was termed the "Electoral-Flock," and these were brought to Tasmania.

After a short time they passed into the hands of Mr. (now Sir) William Mitchell, who brought them to his Barfold Station, near Kyneton. To induce Sir William Mitchell to part with them, Mr. Learmonth offered two sheep to one of the pure flock, and thus obtained the pure breed he so much desired. Such is the origin of the pure Ereildoune flock. About the year 1851 a few rams from the celebrated Camden stud were used, and in 1862 some sheep from Mr. Kermode's pure flock from Mona Vale, Tasmania, were also used to great advantage. In 1873 Ereildoune was purchased by Sir Samuel Wilson, and, under the skilful classing and selecting of Mr. Jonathan Shaw, a great improvement has been made in the size of the sheep, and in the quantity and quality of the wool, which is confirmed by the high price paid for Ereildoune washed wool in 1886, during the great depression, viz., 5s. 1½d. per lb.—the highest price paid for wool sold

in open market. As a result of the careful and scientific management of this flock, many are the prizes which have been obtained in show yards and at sales of sheep and wool.

Prizes gained for wool:—Crystal Palace International Wool Exhibition—1st Award, and a 2nd for washed combing wool. Same time and place:—Drapers' Company's Gold Medal; also Silver Medal. Paris Exhibition, 1878—Only Gold Medal for Victorian wool. Melbourne Exhibition, 1873—Only Gold Medal. Melbourne International Exhibition, 1880—Five 1st Prizes, one 2nd, one 3rd, and Grand Champion Gold Medal for collective exhibit of merino wool; also Grand Champion Prize Gold Medal for ewes' fleeces. At the Melbourne ram sales, 1881, the three best sold for an average of £234 10s. each. In 1882, at Melbourne sales, three averaged £283 10s. each.

The Ercildoune wool in this year's (1888) January and February London sales stands at the head of the list of prices—eighty-one bales averaged 41½d. per lb.

It is evident that the fat sheep (wethers) from this flock stand in a very high position as meat producers; for, in 1873, 2,000 to 3,000 wethers were sold in Ballarat, and averaged 80 lbs. each, some exceeding 90 lbs. in weight, which is a great weight for merinos.

Following are the samples of wool in this Museum:—

No. 1. Washed hogget wool; representing the very pick of the Ercildoune clip of 1886, which fetched the sensational price of 5s. 1½d. per lb.; and, considering there was a depression in wool at that time, the price is all the more remarkable. As wool for manufacturing it may be called perfection. It is of medium length, with pure, clear fibre from bottom to tip, very finely and regularly serrated, of great elasticity and softness, with beautiful lustre. As a manufacturing wool, it can be used for many purposes. On account of its beautiful lustre and softness it is bought by silk manufacturers to mix with silk, and very little wool grown can be used for that purpose. As a combing wool to make the best of fancy dress goods, it has no superior and very few equals. It has sufficient length of staple of fine wool, and will give its full weight in "top" or "sliver," and, therefore no "noil," a great consideration in the making of worsted goods. For hosiery materials it is highly esteemed, and when made into yarn for that purpose, which is not subjected to the hard twisting required in combing or worsted yarns, it shows to great perfection in fullness, softness, and brightness, and can be used for pure white goods or can be dyed the most delicate shades; also, it may be used on the finest branches of cloth manufacture, such as broad-cloth and billiard-cloths, and as a felting-wool is all that can be desired. Another qualification in this wool, which enhances its value greatly, is the get up, which cannot be improved upon, for it retains its softness, brilliant lustre, and pure whiteness. The spinning (worsted) qualities of this wool will give the very highest counts in Australian wools—141s. (see p. 92); value, 5s. 1½d. per lb.

11,350.

No. 2. Is the top, sliver or combed wool from No. 1, and substantiates the above remarks as regards its value as a combing wool; here we see its great lustre and purity of fibre. Value, 7s. 3d. per lb.

13,286.

No. 3. Yarn from combed top (No. 2); ready for use in making dress goods, and, from its extreme fineness, with still that pure colour, lustre, and silky touch. Represents yarn spun into counts (spinning), 141 s.—the highest quality of Australian wool spun into yarn; value, 9s. per lb.

13,850.

No. 4. (*See Fleece Case*). Fleece from same clip as No. 1; a little lower in quality, but possesses the same lustre and soft silky feel, with larger serration, giving a little noil. Spinning quality, 115s.; value, 3s. 3d.

No. 5. (*See Fleece Case*). Showing great contrast to No. 1, being much lower and stronger; inclined to a deep grown combing, with long, bold staple, which is bright, sound, clear in fibre, and much used in the combing or worsted trade. The finest part of this fleece would spin to 80s.; breech, or lowest part, 56s.

See in the table of counts, page 92, which is taken from Dr. Bowman's "Structure of the Wool Fibre," but compiled by Leroux, which gives the lowest counts of Australian wools at 75s.; but it is pretty certain that the lowest merino wool grown in the Colonies was not tried, for I am confident it will go as low as 48s. This opinion is endorsed by gentlemen who have been in trade a lifetime, both as spinners and woolstaplers.

No. 6. Greasy wool from aged stud ram (extra high class), which is a good length, with density, brightness, and good serration; little wasty tip.

No. 7. From aged stud ewes, in grease; artificially fed; 1st Prize, Melbourne; has no superior in type of wool in the collection; long staple, with fineness, cleanness, and lustre; beautifully serrated to tip; is soft, silky, and reminds one of No. 4. Spinning quality, 115s.; value, 16½d.

No. 8. Wool of four-tooth stud ewe; combing, of great lustre and density. Spinning quality, 115s.

No. 9. Four-tooth ewe's wool; not so long as No. 7; lower in quality; rougher in tip, giving more noil; deeply serrated all through. Spinning quality, 100s.

No. 10. Very bold, bulky combing wool from four-tooth stud ewe; is very even, sound, with lustre, and light in condition. Spinning quality, 100s.

No. 11. Free, long, full-stapled, combing wool, from four-tooth stud ewe; deeply serrated; elastic, with tippy top, not so fine as previous specimens. Spinning quality, 96s.

No. 12. Wool from stud ewe hogget; takes very much after No. 1, being a little shorter in staple and tipping; other qualifications the same. Spinning quality, 141s.

No. 13. Four-tooth stud ewe's wool; is a little open and inclined to thinness; has nice lustre; deep serration and elasticity. Spinning quality, 80s.

No. 14. Combing wool from six-tooth stud ewe; artificially fed; medium length; full staple; dense, with lustre; little lower in quality. Spinning quality, 74s.

The value of these wools in grease, 15½d. per lb.

Eight samples of commercial wool from M. Buchanan, Esq., Titanga, Lismore, Victoria, 90 miles from Melbourne.

10,817.

This type of wool is very much sought after by the Americans, and, on account of its light condition, boldness, and felting qualifications, are prepared to give high prices for it for either hosiery or worsted purposes.

No. 1. Hogget's wool, of a very superior quality; of great length; bulky, bold staple, which is very full from top to bottom; finely serrated, and very light in condition. Spinning quality, 70s.

No. 2. From same flock as No. 1; a little coarser, with tendency to openness; nice length, bright, well serrated; will yield little noil. Spinning quality, 66s.

No. 3. A bold lofty combing, of good length; of even full staple, with density, lustre, nice serration. Spinning quality, 66s.

No. 4. Little shorter in staple, and inclined to openness; fibre showing a little coarseness, with fuzzy tip, which will waste. Spinning quality, 62s.

No. 5. Bulky, bold combing, of fair length of staple; is very full, dense, well serrated, bright and pliable. Spinning quality, 62s.

No. 6. A lofty, long, bold wool, free in staple; is full from top to bottom; sound and lustrous; will give good weight in top. Spinning quality, 62s.

No. 7. Free, long, bold stapled combing wool; bright, deeply serrated, sound, and pliable. Spinning quality, 60s.

No. 8. Similar to No. 7, differing only in quality; gives more noil. Spinning quality, 58s.

Value of these wools in bulk, 1s. 2d.

Two samples of wool from hogget, bred by W. Lewis, Esq., Stoneleigh, Beaufort, Victoria, 130 miles from Melbourne.

10,830.

No. 1. Takes very much after the Titanga type, and the same remarks will apply to wool of same quality. Spinning quality, 62s.

No. 2. From same class as No. 1; washed in hot water; shows a bold, sound, lustrous wool of combing length, and is well got up.

Four samples of lambs' (greasy), from same station.

10,831.

No. 3. Very light, bulky wool, with good tip; used in making hosiery and under garments.

No. 4. Much the same as No. 1, with more lustre.

No. 5. Very heavily serrated; bright and soft.

No. 6. Much lower in quality, showing wild tip so often seen in lamb's wool. Value, 1s. 2d. per lb.

Two specimens of lambs wool from John Ware, Esq., Yallappown Station, Victoria, about 130 miles from Melbourne.

17,170.

No. 1. Greasy lamb's wool, "Stoneleigh" breed; same description and value.

No. 2. Washed lamb's wool from same station; is very fine quality; lofty and lustrous. Value, 2s. per lb.

(Wools shown at the Colonial and Indian Exhibition, London, 1886).

One sample of wool from two-tooth ewe, bred by Joseph Ware, Esq., Mingal, Caramut, 160 miles west of Melbourne.

No. 3. A smaller style of wool than is generally grown in western Victoria; thin in staple, which is a fair length; a very fine soft fibre, of great lustre; heavily serrated; pliable; rather heavy top; would be much improved on crossing for density, which would do away with the too fuzzy tip. Value, 1s. 1d. per lb.

Two samples of wool from Chas. Ayrey, Esq., Warranook, Victoria, well known as a breeder of high-class sheep.

17,165.

No. 1. A beautiful specimen of combing wool from ewe; for length, with quality, equalled by very few; the fibre is fine, small, and with even serration; bright, elastic, and soft; when washed, will yield its full weight in top, and spin to high counts—120s.

No. 2. Is a slight improvement on No. 1 in lustre; is very good; samples too small to value. Spinning quality, 120s.

Specimen from T. Dowling, Esq., Jellalabad, Darlington, 123 miles west-by-south of Melbourne—a breeder of high standing, and very successful.

17,172.

No. 4. The sheep are much sought after by breeders, and the wool realizes good prices. This sample is ram's wool, of beautiful character, being a very bold combing, of good length; full all through, dense, well serrated, lustrous, elastic, and silky, yielding little noil.

One specimen of hogget wool, from Geo. Carmichael, Esq., Retreat Station, Casterton, 271 miles west of Melbourne.

17,179.

No. 5. Out of Retreat ewe, Lara and Ercildoune strain; is a lengthy wool of very sound, lustrous, clean, pure fibre; evenly serrated, soft, pliable, but decidedly heavy in tip; will give much noil. Spinning quality, 110s.

One sample of wool of eight-tooth stud ewe from Messrs. Molesworth & Mattherson, Moranghurst, Victoria.

17,180.

No. 6. A light, rather thin staple, lacking density; inclined to be fuzzy, but bright, elastic, and pliable; suitable for the hosiery trade.

One sample of ewe's wool from R. Ramsden, Esq., Bunnybrungle, Victoria.

17,171.

No. 7. Waranook breed, from Canowie ram; a long bold combing, with rather thin staple; well and distinctly serrated; has fuzzy top. Spinning qualities, 66s.; value, 1s. 1d. per lb.

Four specimens of wool from Thos. Russell, Esq., Warrook Station, Rokewood, Victoria, 83 miles west of Melbourne.

17,167.

No. 8. Hogget combing wool, of good quality; bright, elastic, soft, full in staple, highly serrated; with little top. Spinning quality, 64s.

No. 9. Bold free combing, of good length and lustre. Spinning quality, 64s.

17,187.

No. 10. Still longer, but lower in quality; little open, bright, and pliable. Spinning quality, 60s.

17,173.

No. 11. Big, bright, bold combing wool from hogget; light in condition; a fine specimen of deep-grown wool. Spinning quality, 58s.

The value of these wools in bulk is 1s. 2d. per lb.

One sample of cross-bred wool of six-tooth ewe from Jacob Austin, Esq., Green Vale, Victoria.

17,169.

No. 13. A most beautiful cross-bred wool, showing slight strain of Leicester, and the same silvery lustre; distinctly serrated; staple of bold formation; will give full weight in top.

This style of wool is running the high-class merino very closely in price, and very often beats it; is used extensively in the worsted trade in Bradford, Yorkshire, Value, 14½d.; spinning quality, 54s.

One sample of hogget wool from E. Bryan Wright,
Esq., Victoria.

17,166.

No. 12. Suitable for hosiery (medium) goods, being a carding wool of bulky staple, nicely serrated, with a soft kind feel. Value, 1s. per lb.

Two samples of Port Phillip* (no breeder mentioned)
hogget's wool.

17,178.

No. 14. Type of wool which bears favourable comparison with most commercial wools grown in Victoria; has great length, with most distinct serration, elasticity, softness, silkiness, and lustre; as a worsted combing wool, is very suitable for the best kind of dress goods. Value, 1s. 3d.; spinning quality, 66 s.

No. 15. A hosiery wool; staple of medium length; inclined to openness; finely serrated; soft, pliable. Value, 11d. per lb.

Nine specimens of washed and scoured wools, Port
Phillip.

17,176.

No. 16. Very superior hogget combing wool (washed in hot water); of nice length; of very pure, sound, lustrous fibre; finely serrated; very well got up; will yield full weight in top. Value, 2s. 6d. per lb.; spinning quality, 100s.

No. 17. Hogget wool (washed in hot water); a beautiful hosiery wool, of medium length, and of great lustre and softness; for pure white yarns, and delicate shades, this sample has no superior in the collection. Value, 2s. 6d. per lb.

17,177.

No. 18. Washed cross-bred, evidently with Lincoln cross, of combing length, with a little wave in staple; will give good weight in top; used in medium worsted goods. Spinning quality, 38s.; value, 1s. 4d. per lb.

No. 19. Little lower in quality than No. 18; in other respects the same. Spinning quality, 36s.; value, 1s. 2d.

17,175.

No. 20. Port Philip scoured combing,—may be used as carding, for hosiery goods; of good colour, soft, pliable; is well scoured. Value, 1s. 9d.

No. 21. Much the same as No. 20, except a shade lower in quality.

* Port Phillip is of course an old name given to all wools grown in Victoria, just as Botany is the name given to wools coming from Sydney, and Swan River the name to wool from Western Australia. In Bradford, Yorkshire, England, the great centre of the worsted manufacturing, spinning, and wool merchants, the term "Botany" is given to *all* Australian merino wools. In London the terms as above are used.

17,174.

No. 24. Very bulky hosiery wool; snow white; a little over-scoured; from Ercildoune sheep. Value, 4s. 2d.

Nos. 22 and 23. Scoured lamb's wool, of very fine quality and softness, with beautiful lustre. (Port Phillip.) Value, 3s. 6d. per lb.

B.—1888 Clip.

From Messrs. G. Russell & Co., Barunah Plains, Victoria. Seven samples.

19,048.

No. 1. Four-tooth stud ram (used in stud flocks); 334 days' growth; weight, $13\frac{1}{2}$ lbs.; a more attractive specimen is rarely met with; one of those high classic combings that are much required and keenly competed for; long, dense, full-stapled, metallic-lustred fibre; sound, of a white silky soft nature, with perfect condition; finely serrated and elastic. Value, $14\frac{1}{2}$ d. per lb.

19,051.

No. 2. Four-tooth stud ram; No. 5, Melbourne sale of rams; bought in at 15 gs.; weight of fleece, 11 lbs.; combing of great length; staple is full all through, sound, fine, soft, white, silky fibre; finely serrated; of great pliability; condition not to be improved. Value, $14\frac{1}{2}$ d. per lb.

19,047.

No. 3. Four-tooth stud ram; No. 9, Melbourne sale of rams; bought in at 15 gs.; weight, $12\frac{1}{2}$ lbs.; not so long as last specimen; is very dense; fine, bold, silky combing; excellent condition. Value, $14\frac{1}{2}$ d. per lb.

19,046.

No. 4. Four-tooth stud ram; 366 days' growth; weight of fleece, $12\frac{1}{2}$ lbs.

19,045.

No. 5. Four-tooth stud ram; 342 days' growth; weight of fleece, $13\frac{1}{2}$ lbs.

19,050.

No. 6. Four-tooth stud ram; 347 days' growth; weight of fleece, 12 lbs.

Nos. 4, 5, and 6 are very similar in every description. As a combing of high breed and character, are in the front rank, and all that a maker of classic goods would ask for. Value, 1s. 4d.

19,049.

No. 7. Two-tooth stud ram; 349 days' growth; weight of fleece, 12½ lb. of lengthy, fine, soft, silky combing; very lustrous, dense, best of condition. Value, 15d. per lb.

Four samples of merino and crossbred wools, from M. Minter, Esq., Dhurringile, Murchison, Victoria.

19,107.

No. 1. Pure merino stud ram; high-class specimen of combing wool; of great depth of staple and quality, combined with lustre of the first order; is soft, fine, sound, bold, silky; excellent tips, with the least possible waste; wool full of character and merit in every respect.

19,099.

No. 2. Wool of Comeback sheep (fine crossbred), by merino rams. This is a splendid type of crossbred, and is finer than many of the deep grown merinos, and one of the best-paying wools grown: staple long, bold wavy, soft, bright, with the smallest of open tips; is used extensively in the Bradford worsted trade. Spinning quality, 54s.; value, 13d. per lb.

19,100.

No. 3. From sheep out of Comeback ewe, by merino ram; bold, bulky, lofty combing; of great length and high quality; staple dense, even, bright; perfect tips and condition. Spinning quality, 50s.; 13d. per lb.

19,098.

No. 4. Crossbred ewe, out of merino ewe, by Lincoln ram; most useful type of crossbred—one that is in great demand and eagerly purchased; staple long, wavy, lustrous, strong, free; will give little noil; splendid condition. Spinning quality, 44s.; value, 11½d. per lb.

Two fleeces, bred and presented by Hon. Phillip Russell, Carngham, Victoria.

19,091.

No. 1. Stud ram; is a much finer wool than is generally found from this station; type very difficult to beat; well-grown, dense, lustrous, kind, silky touch; nice serration; condition of the best. Spinning quality, 86s.; value, 13d. per lb.

19,092.

No. 2. Stud ewes (hogget); show attractive bold combing, with long wavy silvery staple; soft, silky, free; nice healthy condition; rich in creamy yolk; sound to the tips. Spinning quality, 90s.; value, 14½d. per lb.

3.—TASMANIA.

Eleven samples of wool of stud rams and ewes from
H. S. Smith, Esq., Harland Rise, Tasmania.

10,859.

THIS collection is varied, being represented by wool from sheep of different ages. These wools are of the highest type, and appear to have much of the Silesian character about them. For density and quality they are all that can be desired.

No. 1. Wool from a four-tooth prize ram at the Northern and Southern Agricultural Shows, Tasmania, which speaks for the high character and breeding of the sheep. The wool is of good length; the staple is full, bold, free, of great lustre, with fibre very finely serrated, elastic, silky, kind; sound to the tip.

No. 2. Two-tooth ram's wool (thirteen months' growth); weight, $16\frac{1}{2}$ lb.; is much longer in staple, shade lower in quality; fine for the length; staple full, bold, with pure, lustrous, well serrated fibre; sound, free; light in condition.

No. 3. Wool from four-tooth stud ewe; weight of fleece, $15\frac{1}{2}$ lb. Champion, Northern Agricultural Society's Show, Tasmania, 14th October, 1885; beautifully fine, soft, bright, and free; of nice length; distinct serration all through; silky, pliable. This specimen is equal to the Ercildoune high-priced wool. Spinning quality, 141s.

No. 4. Two-tooth ewe's wool; a prize taker at both Northern and Southern Agricultural Shows, Tasmania; is a larger grown wool than No. 3; long silvery staple; of lustrous, fine, sound fibre; of bold, well-proportioned staple all through; a really good specimen of hoggets' wool. Spinning quality, 140s.

No. 5. Extra long combing wool, from two-tooth ewe; as a long, bold, sound, free, combing, hogget wool, this sample must take first position; it is the longest in the whole of the Tasmanian collection, and it is not often we see such lustre, nice serration, silkiness, and quality in such long-grown wool; the fibre is very sound, strong, and pliable.

No. 6. Wool of four-tooth breeding ewe, with nice length of staple; clear, bright, and wavy fibre all through; not so soft or kind as other samples. Spinning quality, 130s.

No. 7. From four-tooth breeding ewe; combing wool; little longer than No. 6; very small fibre; free, soft, kind.

No. 8. Four-tooth breeding ewe's wool, of medium length; fine quality, with density, lustre, and softness; rather wasty tip.

No. 9. Four-tooth ewe; similar to No. 8. Nos. 7, 8, and 9, spinning qualities, 130s.

No. 10. Wool from breeding ewe; little thin in staple, which is a fair length; deep serration; free, bright, and sound. Spinning quality, 100s.

No. 11. Bright, even-stapled wool, from two-tooth ewe; medium length and quality, soft and pliable. Spinning quality, 130s.

No. 12. Bold, full-stapled specimen, from two-tooth ewe; bright and even in length and quality; well serrated all through; soft and kind to handle. Spinning quality, 130s.

Seven samples of wool from W. Bennett, Esq., Bloomfield, Ross, Tasmania.

10,833.

These specimens are of high class type, very evenly grown throughout, and have no superior in this collection. The Silesian strain seems to predominate, with more length.

No. 1. Wool from stud ram "Majenta II"; weight of fleece, 20 lb. 6 oz.; a very superior specimen of combing wool, of nice length, very fine in fibre, bright, clear, finely serrated, silky, soft, elastic, with great density, and stands among the best of its class. For breeders requiring density and quality in their flocks this type is highly commendable.

No. 2. Two-tooth stud ram's wool (15 lb. 8 oz. fleece); of good length; fine quality, with lustre, silky touch, pliability; is very desirable wool throughout.

No. 3. Wool from aged ewe. The best specimen for an aged sheep in the Museum; even for density, fullness of staple, brightness, and softness, it is superior to many younger stud ewes; a little shorter in staple than others from the same flock, but that one cannot be surprised at. Spinning quality, 140s.

No. 4. An extra fine combing wool from two-tooth ewe; the fleece weighed 13 lbs. 4 oz., and for good length, density, quality, fine silky wavy fibre, with elasticity, has not its superior in the Museum. Spinning quality, 140s.

No. 5. Same age and description as No. 4, with the exception of length; weight of fleece, 13 lb. 5 oz.; spinning quality, 13 oz.

No. 6. Two-tooth ewe's wool; weight of fleece, 13 lbs. 5 oz.; very similar to No. 5. Spinning quality, 130s.

No. 7. Wool from two-tooth ewe; little shorter than previous samples; same formation of staple and fibre, with little more wasty tip. Spinning quality, 120s.

Three samples of wool from stud rams. W. Gatenby, Esq., Woodbourne, Tasmania.

8,549.

These samples have great tendency to an extra fine quality.

No. 1. Wool of two-tooth merino ram; 12½ months' growth; awarded third prize at Northern Agricultural Society's Show, Tasmania, 7th October, 1884; fineness of fibre, with delicate appearance, is here fully represented, and in that respect it stands first in the Museum; the length of staple is what might be termed a "carding," or too short for the combing machine; very bright, soft, elastic, silky, with pure, clear, and sound fibre; finely but distinctly serrated.

No. 2. Four-tooth ram's wool; 12½ months' growth; awarded third prize at Northern Agricultural Society's Show, Tasmania, 7th October, 1884; is much longer and bolder grown wool than No. 1; very full, wavy staple, of combing length, with superior quality; bright, silky, soft; is very pliable.

No. 3. From four-tooth ram; 12½ months' growth; highly commended, Northern Agricultural Society's Show, 7th October, 1884; is little longer in staple than previous specimens; not so fine; is a combing wool, of nice length, with full, bold, even staple of distinctly-serrated fibre; lustrous, soft, pliable, and dense, giving a little tip.

Eleven specimens of stud sheep wool from G. F. Thirkell,
Esq., Darlington Park, Tasmania.

10,902.

These wools are of very superior combing type, showing length with quality and purity of fibre, indicating high-class and careful breeding.

No. 1. Ram's wool; 12 months' growth; weight of fleece, 13 lbs.; is light in condition; very free; sound; of medium length of staple; very lustrous, heavily serrated, and dense.

No. 2. Wool of ram; 12 months' growth; weight of fleece, 13 lbs.; little longer than No. 1; lighter in condition, with very fine soft, silky, wavy staple; of clean, sound fibre.

No. 3. Medium lengthed combing wool of ram; 12 months' growth; weight of fleece, 13 lbs.; the staple is full and of great quality; nice serration; soft, and kind to handle; a little more wasty tip than above sample.

No. 4. Wool from stud ewe (rearing lamb); a bright-conditioned combing wool, of fair length; soft, kind, pliable. Spinning quality, 120s.

No. 5. Wool of stud ewe hogget; 12 months' growth; short, light-stapled wool; very free, bright, sound, wavy staple. Spinning quality, 130s.

No. 6. Two-tooth ewe's wool (shorn as lamb); not so fine as other wool from this flock; is much larger grown; longer, with a beautiful lustrous, wavy staple all through; has kind, silky touch; little wasty tip. Spinning quality, 100s.

No. 7. A very bold wool from ewe hogget, possessing fineness, with clear, bright, full staple. Spinning quality, 120s.

No. 8. Takes after No. 7, with more wavy fibre.

No. 9. Wool from ewe hogget; very long, lustrous, deeply serrated, free staple; is inclined to be stringy, and has a tip that will waste much. Spinning quality, 130s.

No. 10. Stud ewe's hogget wool; 11 months' growth; of light, soft, silky staple; bright, sound; very light in condition. Spinning quality, 100s.

No. 11. Shorter than previous specimens from this station; is very bright and clear; dense, fine, small, wavy staple; used for soft yarns.

Thirteen samples of wool from Thomas Parramore, Esq.,
Beaufort, Tasmania.

8,608.

This wool is grown with a view to length, quality, and density, which objects are strikingly attained, more especially in the younger sheep.

No. 1. Wool from stud ram "Sirius," six-tooth; 12 months' growth; weight of fleece, 16 lbs.

Pedigree of "Sirius":—By "Elector" by "Earle King" by "Sir Robert." As a ram to infuse density, has much to recommend it. The wool is of medium length, very bright and lustrous; of great density and evenness, the staple of which is bold, finely-serrated, silky; very little tip; will yield full weight in "top."

No. 2. Four-tooth stud ram "No. 6"; 14 months' growth of wool; 17½ lbs. weight.

Pedigree of "No. 6":—By "First Water," by "Shepherd King," by "Duke," by "Old Sir Thomas"; and therefore contains some of the bluest blood known. As a specimen of wool, is superior to No. 1, being much longer in staple, which is free, bulky, full to the tip, soft, pliable, lustrous, silky, distinctly and finely serrated, whilst density is a distinct feature; in combing, will give good weight of top, with little noil.

No. 3. Sample from stud ram "No. 9," having the same pedigree as No. 2, which it resembles very much, with the exception of length, being shorter.

No. 4. From stud ram, two-tooth; pedigree as "Sirius"; is slightly finer in fibre; smaller serration; in all other respects an undoubted relation.

No. 5. Two-tooth ewe's wool; 12 month's growth; weight of fleece, $12\frac{1}{2}$ lbs.; a long fine combing wool of bold formation, with great quality, lustre, and density; sound, clear; evenly serrated, and pliable. Spinning quality, 140s.

Nos. 6, 7, 8, 9, 10. Similar to No. 5, showing larger, wavy staple, of bold, lustrous wool, with kindness and density. Spinning quality 130s.

Nos. 11, 12, 13. Two-tooth ewes' wool, which are a little shorter and smaller in fibre; in other respects equal to the above. The ewe fleeces, as mentioned, averaged $12\frac{1}{2}$ lbs.; the wool is very light in condition. Spinning quality, 120s.

Eight specimens from Robert D. Finlay, Esq., Douglas Park, Tasmania.

10,822.

Two-tooth stud ewes' wool, by stud ram "Sir Douglas." It differs very much from general type of Tasmanian wool. It is short in staple, and what is termed a small wool. Used as carding for hosiery and cloth goods; is bright, soft, with great density and soundness; finely serrated; takes much after the "Silesian" grown wool.

10,823.

One sample of stud ewe's wool, with lamb. It is much longer than previous sample; very dense, lustrous, soft kind, with nice wave.

10,824.

Nos. 10 and 11. Two samples by son of "Sir Douglas." Here is a great improvement in length, but not the same bold full staple; is equal to former in other respects. Spinning quality, 120s.

10,825.

No. 12. Stud ram; son of "Sir Douglas"; four-tooth. Is a much longer specimen than any other in this selection, containing all the great character and breeding of this really superb wool; is of medium length, great density, elasticity, lustre, and freedom; the fibre is very fine, sound, pure, and silky, with fine serration; in excellent condition.

Three specimens from A. M. Mackinnon, Esq., Mountford, Longford, Tasmania.

10,826.

No. 1. Wool from four-tooth ewe (twelve months' growth), with lamb; unhoused; awarded 1st prize for best unhoused merino breeding ewe at Northern Agricultural Show, 1885; for evenness, regularity, and length of staple, softness, elasticity, as a high class combing, it takes a high position in this collection. Spinning quality, 140s.

No. 2. From eight-tooth ewe, with lamb at foot; much shorter than No. 1, but with clear and well defined staple.

No. 3. Six-tooth ewe's; wool a little lower in quality; soft, bright, and dense.

One sample of wool (greasy), grown in "Maria Island," Tasmania.

386 F.

A strong heavy combing, representing a low-bred Welsh wool; when combed will show much brightness; will give much noil. Spinning quality, 34s.; value, 7d. Presented by Signor Bernacchi.

4.—SOUTH AUSTRALIA.

SOUTH Australian wool represents a different type to that of any other Colony. From its great length, strength, and almost metallic brightness, and in many cases a coarseness resembling cross-bred, it appears to form a class by itself. The reason is difficult to find, as the Colony contains many descendants of some of the finest woolled sheep known. In my opinion they are the progeny of the Chunah breed (Spanish), which grow a much longer and coarser wool than any other merino, and when crossed with the finer families in a suitable climate, produce that deep-grown wool so well known as that of South Australia.

The following wools were shown at the Colonial Indian and Exhibition, London, 1886:—

Twelve specimens of merino wools from John Riddoch, Esq., Yallum Park Station, Penola.

17,208.

These samples are arranged in qualities, forming an interesting collection, and justly hold the premier position amongst the South Australian wools in this collection.

No. 1. Stud ram; has a deep grown combing wool; this is by far the best of the twelve, and one that could not be well surpassed; it is of good length, without being too long; of a silvery brightness, with fine, silky, full, bold, wavy staple; of great elasticity and kindness; the fibre pure and sound all through; will yield full weight in "top"; as a manufacturer's wool, it may be used in worsted lustres of the most delicately dyed fabrics. Spinning quality, 66s., which is a very superior quality for a deep-grown wool; value, 15½d. per lb.

No. 2. Stud ram ; a very similar wool to No. 1, the only exception being its broader serration, and not so full staple. Spinning quality, 66s. ; value, 15½d.

No. 3. Equal in quality and general character to previous samples, with one of the most perfectly formed staples to be seen ; is very full, close, compact all through. Spinning quality, 66 s. ; value, 15½d.

No. 4. Resembles No. 3 ; it is difficult to separate them in any respect, the only difference being that this sample is a little more wasty in tip, and a trifle longer in staple. Spinning quality, 66s. ; value, 15½d.

No. 5. Showing lower quality ; the staple is of nice length, but not so compact or free as above specimen ; is a full, lofty, bright wool ; soft and pliable ; will give good weight in sliver. Spinning quality, 62s. ; value, 13½d. to 14d. per lb.

No. 6. Very bold, dense, close combing ; bright, sound, free ; very pliable, wavy staple ; not so soft to handle as others, with more nœil. Spinning quality, 60s. ; value, 12d. per lb.

No. 7. Takes much after No. 6, with a broader and rougher tip. Spinning quality 58s. ; value, 11d. per lb.

No. 8. Very bright silvery combing, of good length ; wavy and pliable staple ; light in condition ; little fuzzy tip. Spinning quality, 60s. ; value, 12d. per lb.

No. 9. Ram's wool, of medium length ; bright lustrous dense staple ; is light in condition, with sound, weighty, pure, wavy wool ; kind to handle ; a nice specimen of a deep grown wool.

No. 10. Ram's combing wool ; nice lengthy, compact, bulky staple ; of well serrated, sound fibre ; is a dense, weighty, solid wool, in good condition, with the most elasticity of any sample in this selection.

No. 11. Wool greatly resembling No. 10 ; slightly thinner and shorter in staple.

No. 12. Ewe's wool, showing lowest quality ; is a very broad light wool, inclined to fuzziness, with coarse open tip ; will waste much. Spinning quality, 52s. ; value, 8d.

Four samples of wool from John Murray, Esq., Murray Vale, Mount Crawford.

17,210.

These wools are of heavy, deep-grown combings, and are in high repute amongst worsted manufacturers. The sheep are in great request in the back blocks, on open and exposed country, to which they appear to be specially adapted, giving a good weight of wool of medium quality, which is not affected by a hot and dry climate, like most other wools.

No. 1. Wool of stud ram, "Young Zulu" ; cut 15 lbs. of wool. This is the longest stapled merino wool in the South Australian collection, resembling a cross between a pure Leicester and Cotswold ; as a merino, too long ; the staple appears thin and stringy, but of fair quality, considering the length ; the wool is bright and sound, with very good tip ; used in worsted cloths or coatings ; as a merino wool, would spin to low counts (54s.), which represent the quality of superior English Down wools.

No. 2. Stud ram's wool; a very dense long bright lustre; very soft, silky, with even navy staple of sound, free wool; has a wasty, noily tip; shade lower than No. 1.

No. 3. Long, lustrous combing wool of ram; general character of deep grown wool.

No. 4. Wether's wool; a combing, of nice length, a soft, kind, silky wool of good quality; a very useful grade. Spinning quality, 60s.

Eight samples of ewes' wool from A. B. Murray, Esq.,
Yarrabarra.

17,209.

These represent useful types of strong combing commercial wools.

No. 1. Combing wool of great length, with full staple; of bright, wavy, silky fibre; soft, sound, and pliable. Spinning quality, 58s.

No. 2. Hogget ewes' wool of good length, and bold, kind touch, with elasticity; a little heavy, yolky, wasty tip. Spinning quality, 60s.

No. 3. After the same type, but a little lower in quality; a well-grown, bold wool, with noily tip. Spinning quality, 58s.

The above samples would represent a superior combing out of this wool.

Nos. 4 and 5. Will represent first combing wool, being lower in quality, with openness; not so compact or dense; is bright and sound. Spinning quality, 54s.

Nos. 6, 7, 8. A second combing; long, strong, loose, fuzzy staple; greatly inferior to the above wools. Spinning quality, 46s.

Eight specimens of strong combing from W. Crozier,
Esq., Anabranck West (Moona Station).

17,206.

Collection of deep-grown wools, of sufficient length to meet the requirements of manufacturers making medium worsted goods; they are a judicious selection, showing the different sorts or grades.

Nos. 1, 2, 3, and 4. These correspond in length and quality, which are suitable; sound, bright, soft, with very little waste. Spinning quality, 58s.

Nos. 5, 6, 7. Lower sort, of very bold combing; clean, bright, giving a little noil. Spinning quality, 54s.

No. 8. Strong, hard wool; very bulky; inclined to fuzziness. Spinning quality, 50s.

One specimen of ram's wool from Messrs. Jas. Saunders
& Co., Canowie.

17,220.

This type of deep-grown wool is amongst the best known grown in South Australia. As a strong merino, it will hold its own with any. Is certainly the strongest style in the South Australian collection. There are samples much longer, but the length of this one is sufficient. It is very dense and compact, with a beautiful, lustrous, wavy staple. Will give a good weight of pure wool.

Four samples of wool from B. Seppelt, Esq., Seppelts-field.

17,204.

No. 1. From stud ram; is the best lustre in the collection from this Colony, and compares in silvery brightness with Lincoln and Leicester lustres; the staple is of nice length, even, wavy, soft, and elastic; the fibre is sound and strong throughout.

No. 2. Evidently a near relation to No. 1; is a little harder to touch, with heavy serration; has great quantity of yolk.

Nos. 3 and 4. Wool of hoggets; very long, deep combing, with bold, full, dense staple, and soft, pliable, mushy wasty top. Will spin to 50s.

Four specimens from H. V. Stirling, Esq., Nalpa Station.

17,207.

Nos. 1 and 2. A good type of strong combing; long, sound, lustrous, wavy staple, with density; is a very desirable wool for worsted goods. Spinning quality, 54s.

Nos. 3 and 4. Much lower quality; light and open, with wasty staple; is bright, with harsh feel. Spinning quality, 50s.

Eight samples of rams' wool, from J. Anderson, Esq., Beula Station, White River, Port Lincoln.

17,215.

Nos. 1 and 2. Well-grown wool; very close and compact; nice, lustrous, free staple; of fair quality; sound all through.

No. 3. Lower in quality, with rather thin, open staple.

No. 4. A bright, lustrous, long, full, wavy, stapled wool; sound and close; will give good weight in top.

Nos. 5 and 6. Very bold, bulky, long, strong, of good proportioned staple; pliable; has wasty tips.

No. 7. Very low, heavy combing, with broad, open, fuzzy top.

No. 8. Soft, open, fuzzy wool, of medium length; kind and pliable; is a wasty wool in combing.

Eight samples from Sir Thomas Elder's Lyndhurst Station.

17,217.

These wools show marked effects of climate, and do not appear to the same advantage as the previous wools from South Australia. They are used in low clothing goods of dark dye.

No. 1. By far the best specimen of deep-grown combing from this station; has good lustre; free, sound, elastic, with little wasty tip.

Nos. 2, 3, and 4. Very earthy, mushy, wasty wool, of medium length; will give much noil.

Nos. 5 and 6. Long, coarse, combing, with curly, fuzzy fibre.

Nos. 7 and 8. Pieces from the above; are little, bitty, and very heavy; will lose heavily in scouring (fully 65 per cent.).

Ten specimens from Sir Thomas Elder's Beltana Station.

17,214.

Nos. 1 to 6. These wools are of good length; all wasty, fuzzy tips; will run much to noil.

No. 7. A bright, light, open wool; good length; hard, noily tip, with harsh feel.

No. 8. Very stringy, thin, and wasty staple.

No. 9. Light, thin, seedy wool, of good length, with much waste.

No. 10. Belly wool; open, coarse, curly hair; burry and tender.

A great improvement in these wools might be effected by infusing a little more quality, which would add greatly to their value. Worth in bulk, 6½d. fleece; pieces, 4d.; bellies, 4½d. Used in making blankets.

Three samples from Fowler's Bay (Messrs. Smith & Swan).

17,212.

These wools are of good length; bright, pliable staple, with open, fuzzy, wasty top. Value, 7d. per lb.

Four samples of wool from E. Salter, Esq., Angaston.

17,213.

Nos. 1 and 2. Wool of rams, strong combing, having a curly, hard fibre; a bulky wool, but light.

Nos. 3 and 4. Hoggets' wool, showing decided improvement; of good length, sound, free, bright, and pliable; a little wasty. Spinning quality, 54s.; value, 8d. per lb.

Fourteen samples of commercial wool, divided into qualities, from Sir Thomas Elder's Condilla Station.

17,210.

Nos. 1, 2, and 3. A fine or first combing wool, of good length, with bright, elastic staple, well serrated, of soft, kind feel; very noily. Spinning quality, 60s.

Nos. 4 to 7. Not so fine, or second combing; long, thin staple; slightly hard feel; mushy, wasty tip. Spinning quality, 56s.

Nos. 8 to 12. A low or third combing wool, of medium length, with harsh feel; broad, mushy, wasty. Spinning quality, 50s.

No. 13. Showing neck piece of very dry, hard, open wool; much waste, but of good length.

No. 14. Belly wool, of good length; very wasty.

One sample from Messrs. Hogarth & Warren.
Brand, H and W over B.

17,221.

Wool of fair length; very heavy in yolk, and wasty.

Nine specimens from Moolooloo Station.

17,205.

No. 1. A very fine, soft, well-grown combing; bright, silky, finely-serrated; stands out prominently as a superior combing in this clip. Spinning quality, 70s.

Nos. 2 to 6. Well-grown, bold, strong, soft combing; bright; has wasty, open tip. Spinning quality, 58s.

Nos. 7, 8, and 9. Three specimens of britch wool, showing much character; are a credit to the station on which they were grown; are very long and lustrous, with nice, even, wavy staple of free strong combing; will yield a little noil; used in low worsted goods. Spinning quality, 40s.; value of this wool in bulk, 8½d.

Four samples of brand "D and P."

17,223.

No. 1. Wool of stud ram, six years old; weight of fleece, 16 lbs.; of long growth; bright, bulky combing; close and sound; a very desirable wool.

No. 2. Deep grown heavy wool; lustrous, wavy, very pliable.

No. 3. A long, close, sound combing, of great brightness, broadly serrated, resembling a very fine Leicester wool.

No. 4. A bold bulky wool; not so compact as No. 3; rather inclined to lightness and looseness. Spinning quality, 58s.; value, 9½d.

One sample from — Kopp, Esq.

17,222.

As a lustre wool, the lowest sample in the collection; certainly not a merino wool—taking after a greasy low crossbred—with thin staple, open wavy hair, wild tips.

One sample from E. Bowman, Esq., Martindale.

17,216.

This wool has lost all trace of merino, being more like our Oxford Downs' wool washed; a light, bulky, spongy wool, of medium length; used in low woollen fabrics.

One sample of South Australian scoured carding wool.

17,225.

Light, fuzzy, with red tinge. Various qualities; value, 1s.

Two specimens of South Australian wool.

17,226.

No. 1. Wool in grease; very heavy in sand; a dirty, loose, spongy, mixed wool. Value, 5d.

No. 2. Wool similar to No. 1; scoured; fair, good colour, very soft and lofty. Value, 1s. 1d. lb.

5.—QUEENSLAND.

A.—To 1887 Clip.

THE wools grown in Queensland, with the exception of those from a few special studs, do not usually bear a good name. Wool buyers, both in the Colonies and England, are generally under the impression that a good commercial wool cannot be grown in that Colony, the idea being that Queensland wools are mostly short, mushy, dirty, and inferior in every respect. Formerly, this was true to a great extent; but the last few years have brought about an entire alteration, and wools from the back blocks, which are grown under practical and careful owners or managers, compete very favourably with the average southern wools, as will be seen from the prices paid for the under-mentioned wools at different times. The collection is very varied, and may be taken as fairly representative, as it has been mostly collected by myself, who have had much experience out west amongst sheep and wool, and know the country and its capabilities.

Nine samples from G. Clark, Esq., East Talgai, Hendon,
Darling Downs.

17,195.

This collection stands in a very high position as a combing wool, and gives an idea to what perfection wool can be grown, even in Queensland, with judicious selecting, careful classing, and regular culling. Great credit is due to the breeder for producing such a useful type of wool.

The Talgai sheep have made a great name at the Sydney sales, when placed alongside Tasmanians for competition, and realized the highest average at one sale.

This flock has a strain of the Tasmanian; but, taken all through, is a much bolder wool, is very clear and dense, and would meet the desires of the most particular manufacturer.

No. 1. Wool of stud ram, First Prize, grass-fed, heavy combing, and Champion heavy combing ram, Toowoomba, 1884; cut 12½ lbs. of wool; The wool is a great length, with bulky full staple all through; is bright, kind handling, very elastic, light in condition, and dense; there is not a more compact, sound, free wool in the Museum, or one that shrinks or wastes less.

No. 2. From stud ram; also a heavy wool, but not so long as No. 1; is of beautiful lustre, with soft wavy staple; of bold formation, free sound fibre, little wasty tip; light in condition, with density.

No. 3. Stud ram; heavy combing, showing more open fuzzy top; staple, good length of bright pure wool; dense, soft.

No. 4. A fine combing wool from stud ram; of nice length, dense, lustrous, good quality; is a very close compact wool.

No. 5. Stud ram's combing wool; little longer than No. 4; rather heavy top; shade lower in quality; carries the "Talgai" type.

No. 6. Wool of stud ewe; First Prize fine combing, Champion fine wool ewe, Toowoomba, 1884; First Prize fine combing, and Champion fine wool ewe; Brisbane, 1884; cutting, $13\frac{1}{2}$ lb. of wool; this wool is of great length, with great quality; the fibre is particularly small for the length; is very soft, silky, and has a nice wavy staple of wonderful elasticity, and density; is extremely light in condition, and must have been from a large compact fleece to give the above weight; is a good paying wool. Spinning quality, 120s.

No. 7. Wool from stud ewe; deep grown combing; is a fair length; not so bold in formation; inclined to be on the fine side; can scarcely be called a heavy combing. Spinning quality, 60s.

No. 8. Stud ewe hogget's wool; First Prize heavy combing hogget, Toowoomba, 1884; light conditioned wool; long, bright; nice, soft feel; very bold staple; dense and pliable. Spinning quality, 64s.

Nos. 9 and 10 (belly wool of ewe No. 76B and No. 1) are decidedly the best specimens of their kind in the entire collection; are long, bright, dense combing; very sound, with fine serration; are devoid of that fuzzy curl so noticeable in these sorts of wool, and which are great recommendations.

Thirteen specimens from Messrs. Hodgson and Ramsay, Eton Vale, Darling Downs.

The Eton Vale stud flock was founded in 1850, by the purchase of a number of ewes of the Brindley Park breed, which are of Silesian descent. These ewes were put to Saxon rams (Steigers) 1852. In 1856, the stud flock was closely culled, the pick forming the select stud flock. Spanish rams were used, and the increase of the latter were carefully selected and bred from to 1863. The owners personally selected and purchased six Silesian rams, which were by the champion ram at the Berlin Exhibition. In 1879, three stud rams were bought from Messrs. Marshall and Slade, Glengallen, and used with excellent results.

List of prizes gained by the Eton Vale sheep at Toowoomba, 1886:—Champion merino ewe, fine combing breeding, against all-comers; Champion merino ewe, strong combing (grass fed). Brisbane National Show, 1886:—Champion merino ewe, fine combing, and winner of Jubilee Challenge Shield; Champion strong combing ewe, also winner of the Jubilee Challenge Shield, thus securing two shields out of a possible four; also, a prize of £10 10s. for the heaviest ewe's fleece, shorn by the Wolseley machine from a champion pure merino ewe, cutting $13\frac{1}{4}$ lb.

This wool is showing great improvement, and is coming into the front as a prize taker.

17,807.

No 1. Stud ram's wool; grass fed; Champion Prize at Toowoomba Agricultural Show, 1886; fleece, 12 lb. skirted; is a fine combing, of medium length, with good lustrous staple and wavy fibre; is a pure sound wool.

17,808.

No. 2. Wool of stud ram; weight of fleece, 14 lb.; is a soft silky wool, of medium length; lustrous and finely serrated, and pliable.

17,809.

No. 3. A fine combing, from stud ram; weight of fleece, 12 lb. 4 oz.; very full, bold; little longer than No. 2; is bright and dense; staple free, sound, with fine serration.

17,810.

No. 4. A long, bold, fine combing stud ram's wool, of silky soft touch, plump staple, bright, and wavy.

17,811.

No. 5. Strong stud ram's combing wool, of long bold growth and even staple, which is very pliable.

17,812.

No. 6. Wool of stud ewe; Champion at Toowoomba Agricultural Show, 1887; fine combing; of soft, silky, lustrous staple of good length, well formed; very elastic; weight of fleece, 13 lb. Spinning quality, 120s.

17,813.

No. 7. Strong combing Champion stud ewe's wool, Toowoomba, 1887; weight of fleece, 14 lb. 4 oz. Spinning quality, 60s. This is a good specimen of deep grown combing; has a great length of staple of clear lustrous wavy wool; very pliable and soft.

17,814.

No. 8. Stud ewe's wool; fine combing, of silvery brightness, and nice length; deeply serrated. Spinning quality, 110s.

17,816.

No. 9. Wool of stud ewe; weight of fleece, 13 lb. 4 oz. Spinning quality, 58s. Deep grown combing, of fair length, and wavy elastic staple; is a useful wool.

17,815.

No. 10. A big, bold, strong combing, of good length; bright, lustrous, soft, and pliable; of strong fibre; heavily serrated staple. Spinning quality, 60s.

17,186, 17,200, 17,203.

Nos. 11, 12, and 13. Were shown at the Colonial and Indian Exhibition as fine combing wools, being much shorter than the above-mentioned specimens; they are decidedly smaller wools in every respect, but with that lustrous wavy staple shown all through this station's wool.

One sample, from pure bred Tasmanian stud ram of "Sir Thomas'" blood, imported into Queensland, 1887, at a cost of £250.

17,823.

From Northampton Downs, Central Queensland.

Four samples of wool from stud ewes—Mr. Hood,
Burenda, Warrego River, Mitchell.

8,552.

These are specimens of deep grown combing, taking after the South Australian type.

No. 1. A long, strong, bulky combing, with light, clear, and bright staple; wavy, pliable, and soft; takes very much after the celebrated "Fisher" breed. Spinning quality, 54s. To give an idea of the quality of these samples, the spinning counts are given.

No. 2. Much the same as No. 1, with a little more wasty tip. Spinning quality, 54s.

Nos. 3 and 4. A lower combing, with heavy mushy tip. Spinning quality, 50s.

Five samples of wool from stud ewes, taken whilst shearing on the Warrego River, near Charleville; after ten months' travelling in the drought. They averaged 12 lbs. per fleece.

8,552A.

Combing wool, inclined to strong or deep grown; are bright, free, kind, of fair length, with density, and wasty open tip. Spinning quality, 56s.

Eight samples from Wm. Hogarth, Esq., Balgowrie,
Darling Downs.

8,702.

Nos. 1, 2, 3, and 4. Pure clothing, from ewes of "Negretti" descent; are the lightest or smallest wools in the entire collection; the staple is very short, thin, and delicate; has very fine serration; of great felting properties; used in making the finest of cloths.

Nos. 5, 6, 7, and 8. Pure clothing wool from hoggets; same breed as above; a little more bulk, brightness, and softness, and put to the same uses.

Samples of wool from Messrs. A. Crombie & Co.,
Strathdarr Station, near Muttaborra, Western
Queensland, about 550 miles west from Rock-
hampton.

17,716.

These wools are grown within the tropics, and will certainly compare favourably with most of the better wools grown in the Riverina (N.S.W.). The country is stony, well sheltered all through by the Gydia-tree (*Acacia*), which protects the sheep from the great heat, thus benefiting the wool immensely, which is very yolky and devoid of that coarse perished top so noticeable when grown on open country.

The produce is of the medium class, giving a weighty fleece, which realizes very good prices. The 1887 clip sold, at the London January-February sales, 19d.; pieces, 16d. The wool is sorted (not classed) and scoured, ready for the manufacturers.

No. 1. Wool of stud ram, "Jimbour," bred on Jimbour, Darling Downs, and supposed to be about twelve years old; the wool was taken in 1886, after passing through the terrible drought, and still retains that beautifully fine, soft, silky wool of bright lustre; it is very light, with wasty tip.

No. 2. Wool of stud ram "Tasman," about ten years old; bred in Tasmania. This is an opportunity of seeing the effects of bad seasons upon high-class sheep. The wool still retains a fair length with quality, but is getting very thin; No. 1 was also much gone on the back.

Nos. 3 to 5. Station-bred stud rams' wool, sons of Nos. 1 and 2, which show very favourably with most station-bred rams in New South Wales; are of fine quality, good length, bold staple, finely serrated fibre, with brightness.

Nos. 6 to 9. Samples from stud rams as above; much longer and stronger; may be called a medium combing, taking much after style as above.

86 F.

No. 9A. Very superior combing wool, 1888 clip; this specimen is by far the finest from this station; is well grown, sound, bright, and finely serrated; in rich yolky condition. Spinning quality, 80s.; value; 11d. per lb.

17,718.

Nos. 10 to 20. Specimens of wool from stud ewes with lambs; ten months' growth; station-bred.

A nice stamp of combing wool, of medium length, even serration, soft, kind, pliable; bright, with very little tip; good supply of yolk; used for worsted goods. Spinning quality, 62s.

17,719.

Nos. 21 to 31. Eight-tooth ewes' wool; ten months' growth; a long combing; very sound, bright, wavy staple; very soft, elastic; little yolky tip; will give a little noil. Spinning quality, 60s.

17,720.

Nos. 32 to 40. Samples of ewes' wool (with lambs); of medium length, good lustre, finely serrated, kind touch, rather thin in staple. Spinning quality, 60s.

17,717.

Nos. 41 to 47. Wool from shurled hoggets (shorn as lambs); a superior carding wool, very suitable for fine hosiery goods; bright, light, with soft, kind, finely serrated, pliable fibre; is sound and free, but inclined to thinness.

Nos. 48 to 55. Little longer than others of same growth; will comb; very bright, pliable, and in light condition. Spinning quality, 62s.

17,721.

Nos. 56 to 58. Ewe hoggets' wool; twelve months' growth; fair samples of what can be grown on young sheep in this district; the wool is long, of medium quality, of full, bold, wavy staple; bright, kind, soft handling; will give a little noil; carries a fair proportion of yolk. Spinning quality, 58s.

Nos. 59 to 61. Clothing wool from shurled hoggets, which contains good qualifications as a clothing wool, with perfect felting properties.

18,302.

Nos. 62 and 63. Scoured ewes' wool from this flock sold in London, last January and February, 1888, sales, and realized the highest average of Queensland wools—19d. per lb.

18,304.

No. 64. Scoured lamb's, of very good quality and lustre. Value of greasy wool (hoggets), 8½d. to 9d. per lb.; ewes, 8d. to 8½d.

Thirty-three samples from Messrs. Williams & Co., Darr River Downs, Muttaborra, Western Queensland, 550 miles west from Rockhampton.

This run adjoins Strathdarr, but is of very different formation, having black and chocolate soil, open extensive plains, no shelter, and may be taken as a fair average of Queensland back blocks as wool-producing country. The sheep have not been regulated, on account of the very unfavourable seasons. The wool will compare favourably with most that is grown in the western districts of this Colony. The clip of 1886 realized very high prices—ewes' wool (scoured), from 23½d. to 22d. per lb; pieces averaging 17½d. The wool was sorted (fleeces divided) on the English system, as done in the factories, ready to go into use, without any further trouble to the users, which no doubt assisted the sale greatly. The 1887 clip was not so fine as 1886, but gave a much heavier weight per fleece. It is devoid of that mushy open top, has a good supply of yolk, but is generally seedy, the result of a wet season. The western grasses are not suitable for producing fine wools, as they become long and dry in a short time, and are therefore better suited for a medium or deep grown wool. I handled a clip of very fine wool at an adjoining station for two years in succession, grown on the same class of country, which did not realize the same price as the medium grown wool, and was much lighter per sheep.

17,010.

Twelve samples of stud rams' wool, after having been twelve months on the run, showing a decided wasty, fuzzy top, but on examination, when opened out, give a very bright, wavy, lustrous, bold staple, with density; of medium length and quality; all specimens resemble each other. These sheep had travelled from Victoria, and had not got over the effects of the journey. When these sheep get acclimatized they will be well adapted to the country.

17,009.

Nos. 13 to 23. Combing wool of ewes; is a nice length, with deeply serrated staple; is very elastic; of medium quality, with small proportion of noil, giving much yolk; used in worsted stuffs. Spinning quality, 60 s.; value, 8d. per lb.

17,008.

Nos. 24 to 28. Clothing ewes' wool; fair quality, with good felting properties; light in condition. Value, 7½d.

17,007.

Nos. 29 to 31. Lambs' wool; very soft, bold, and silky; is well grown, and shows a decided improvement on previous samples.

No. 32. Scoured clothing wool, which realized the highest price of Queensland wools, clip of 1886—23d. per lb.

No. 33. Scoured combing wool; highest price for Queensland wool—(23½d. per lb.)

Thirty-seven samples from Wellshot, near Barcaldine, 420 miles north-west of Brisbane, Central Queensland; owners New Zealand and Australian Land Company (Limited).

17,817.

This is a very large run—about 1,800 square miles—and was formerly called “desert country,” and useless. It is now greatly improved, artificially watered by dams and tanks, and carries at present about 240,000 sheep, and will be capable of carrying 600,000 when the improvements are complete. The formation varies much—some vast, open plains; much, well sheltered, and capable of growing a very useful class of wool. Numbers seem to be the main object. The wool from the main flock is very thin, hard, open, and low in quality, requiring an introduction of new blood.

Nos. 1 to 4. Stud ram's wool; has a strain of East Talgai blood, but has lost the bold, long, lustrous, bold type known in that breed, and is decidedly going back; the wool is rather short, with rather fuzzy, open fibre; good supply of yolk.

17,818.

Nos. 5 to 9. Wethers' wool, of a nice combing length; of medium quality; light in condition; harsh touch; very little noil. Spinning quality, 56s.; value, 7½d.

17,819.

Nos. 10 to 27. Wool of stud ewes; of medium length of staple, which is full, bold, of fine serration, and kind to handle; slight noily tip; used in medium hosiery yarns of dark shades. If combed, will spin to 60s.; value, 8d.

17,822.

No. 28. Wool from aged ewe, showing large and distinct serration.

17,821.

Nos. 29 and 30. Ewe hoggets' wool; a bold, long, medium combing, of bright, wavy staple; is soft, pliable; a real worsted wool. Spinning quality 62s.; value, 8½d.

17,820.

Nos. 31 to 37. Stud ewes' wool; aged; fine clothing wool; is bold, lofty, with soft, kind feel, and dense. These are nice specimens of clothing wools. Value, 7½d per lb.

Six samples of wool from J. G. Dougharty, Esq., Yarronvale Station, Paroo River, 600 miles west of Brisbane.

17,821a.

Nos. 1 to 5. These wools are from hoggets, fed entirely on Mulga scrub; combing, of good length, with very full, bold staple, which is very sound, bright, and well serrated, having a very fuzzy, open top, giving much noil; this wool, when scoured, sold for a high price—22½d.—during the depression of 1886; a good worsted wool for medium qualities of goods. Spinning quality, 56s.

No. 6. Wool of ewe; eighteen months' growth, giving an idea of the length wool can be grown to. This sample is very sound all through, with good quality for length.

Ten samples of wool from Evesham Station (owners, Lansdowne Pastoral Co.), near Muttaborra, Western Queensland, 600 miles west of Rockhampton.

18,307.

These specimens, off the 1886 clip, show the result of the sun on fine wool, grown on the open plains, in a dry season.

Nos. 1 to 2. A carding ewe's wool, with fuzzy, open top; is dense and lofty; useful as medium hosiery wool.

Nos. 3, 4, and 5. Much longer than first samples; full staple, of finely serrated fibre; is very much perished; when combed will give a very short sliver, or top, and a great quantity of noil. Value, 7½d.

Nos. 6, 7, 8, and 9. Hoggets' wool; of fine quality; free wavy staple; is a carding. Value, 8d.

Ten specimens of commercial wools from Messrs. Shanahan and Jennings, Westbrook Station, Gowrie, Darling Downs, about 120 miles west from Brisbane.

18,176.

No. 1. Medium combing wool of ewe (weight of fleece, 6 lb.); is of good useful length; very finely and evenly serrated, and bright, but has a decidedly wasty tip, which will give much noil. This sheep, before shorn, evidently rubbed itself, thus giving a felted matty top. Spinning quality, 62s.; value, 8d. per lb.

18,177.

No. 2. Wool of six-tooth ewe, with fair staple; of nice, wavy, elastic fibre, inclined to thickness; giving a little more noil than No. 1; shade lower in quality. Spinning quality, 60s.; value, 8d.

18,178.

No. 3. Lofty bulky wool, from six-tooth ewe (with lamb); of light condition, nice length, with softness; the staple is inclined to fuzziness; has little tip; as a hosiery wool is useful.

18,179.

No. 4. Wool from six-tooth ewe, and at first sight has a taking appearance, being very bright, with good length, and well serrated, with little tip, giving little noil; on testing, it is very tender, which in combing wools is very detrimental; may be used for hosiery or clothing purposes. Value, 7d.

18,180.

No. 5. Breech, or britch (lowest part of fleece from thigh), of No. 4; well grown and bulky; is tender, with broad top—a characteristic of all Breech wool. Value 6d. Used in low goods, such as blankets, house rugs, &c. I would advise an introduction of fine woolled rams, to give more quality and density; the length is all that is required.

18,181.

No. 6. Wether's wool; a nice style of combing; good length; bold, full staple; wavy, bright, and pliable; soft fibre, with little noil. Spinning quality, 60s.; value, 8d. per lb.

18,182.

No. 7. Wool of wether; a decided contrast to No. 6, being thinner in staple, rather open, with delicate wasty tip; light in condition; will give much noil. Spinning quality, 58s.

18,183.

No. 8. Very long deep-grown combing, from wether; weight of fleece, 9½ lb., with thin light staple; heavy in condition; very wasty, but soft; kind to handle. Spinning quality, 54s.; value, 7d.

18,184.

No. 9. A bold, bulky wether wool; weight of fleece, 9½ lb.; much lower in quality; wasty, fuzzy staple. Spinning quality, 50s.; value, 6d. per lb.

18,185.

No. 10. Wool of hogget; bold, deep-grown combing; distinctly serrated; bright; little wasty tip. Spinning quality, 56s.; value, 8d.

Three samples from G. Clark, Esq., East Talgai, Darling Downs.

17,195.

The following are specimens shown at the Indian and Colonial and Indian Exhibition, London, 1886 :—

No. 1. Superior combing (ewes); this wool compares with the fine wool of New South Wales very favourably, and is a high class commercial wool of good length, of well-defined staple; full, pure fibre all through; finely serrated, silky, soft, elastic, lustrous. Will spin to 80s.

No. 2. A much longer and bolder stamp of wool; little lower in quality than No. 1; rather open top; is bright, silky, kind, pliable; will give a little noil. Spinning quality, 66s.

No. 3. Combing wool; little shorter and coarser than No. 2; very soft, kind, sound, lustrous; nice, wavy staple. Spinning quality, 60s.

Four samples from C. B. Fisher, Esq., Ellengowan Station, Darling Downs, about 140 miles from Brisbane.

17,198.

No. 1. Ram's strong combing wool, of great length; of lustrous, sound, free, staple. This style of merino (strong) has many admirers amongst wool growers requiring weight of wool per sheep in preference to quality; the wool can stand the heat and exposure on the open plains much better than more delicate wools. Spinning quality, 56s.

No. 2. Much shorter than No. 1; very lustrous, sound, wavy staple; is a soft handling wool. Spinning quality, 58s.

17,184.

No. 3. Deep-grown combing; bright-woolled staple, with broadly serrated fibre. Spinning quality, 54s.

No. 4. Takes much after No. 3, with little more tip. Spinning quality, 54s. These wools are used in the Bradford worsted-stuff trade, where they are held in high estimation. The lower sorts are used with the better class of English demi-lustre wool.

Two samples from Messrs. Marshall and Slade, Gulgallan Station, Darling Downs, about 120 miles south-west of Brisbane.

17,183.

No. 1. Wool from hogget ram; superior quality of bright, lustrous wool, of good length; very free, kind to handle, of soft silky touch, very pliable, fine serration; will bear comparison with either Victoria or New South Wales' wool of the best type.

No. 2. Hogget ram's wool; little lower in quality than No. 1, but longer staple, which is bold, bulky, wavy, dense wool; very heavy in yield; rather wasty tip.

Three samples of wool (ewes') from Messrs. Shanahan and Jennings, Westbrook, Darling Downs; fed on natural grasses grown on rich black soil.

17,182.

Nos. 1, 2, and 3. Combing, inclined to medium quality; fair length; very bulky soft wool, with heavy wasty top; finely serrated and elastic; will give much noil.

Nos. 1 and 2. Spinning quality, 58s.

No 3. Spinning quality, 54s.

Three specimens from Geo. Gore, Esq., Yandilla, Darling Downs; washed in hot water.

17,187 and 17,199.

Nos. 1 and 2. Ewe's combing wool, of medium length; of average quality; bright and wavy staple; when combed, will give full weight in top. Spinning quality, 64s.

17,194.

No. 3. Ewe hogget wool; rather short, with full staple; very pliable, soft; little seed. Spinning quality, 66s.

Four samples of ewes' wool, washed in hot water, from "Pikedale," the property of the Queensland Pastoral Company (Limited).

17,190.

No. 1. Very superior carding wool, of bright colour; soft, full to handle, and a desirable hosiery wool for super goods.

No. 2. Little lower than No. 1; of good colour, but a curly fuzzy hair of fair length; staple; inclined to thinness.

No. 3. Showing a low combing of nice colour, but a wasty staple; harsh and hard.

No. 4. Clothing wool of super quality; bright, bulky, fuzzy, loose fibre; suitable for cloth goods.

Two specimens of black or brown wool from W. Allen, Esq., Dalveen, Warwick, Darling Downs.

17,188.

No. 1. Very short soft wool; a decided clothing wool.

No. 2. Long strong wool, with fast wasty staple. For the utilization of black wool for manufacturing purposes. See page 12.

B.—1888 Clip.

Twenty-seven samples from East Talgai Station, Darling Downs, Queensland; bred and presented by owner, Geo. Clark, Esq.

This is a most extensive collection, and interesting, especially taking into consideration the great disadvantages under which the wool was grown, having passed through a nine months' drought. I find that the wool retains its quality, lustre, and density, but naturally has not that lengthy staple found in specimens sent some time since to the Museum.

*Rams' Wool.***1 F.**

No. 1. Stud ram; a useful type of combing; nice length of staple, with good quality; dense, bright, silky, soft, elastic; beautifully serrated; light even tips, giving very noil; desirable condition. Spinning quality, 84s.; value, 12d. per lb.

2 F.

No. 2. Not so bold as No. 1; staple, medium length; equal in quality, lustre, and of the same fine, soft, silky nature. Spinning quality, 84s.; value, 12d. per lb.

3 F.

No. 3. This specimen is a very showy attractive type; medium growth; even, dense, good quality; soft, lustrous fibre; clean, sound, beautifully serrated, pliable; splendid condition, with small black tips. Spinning quality, 80s.; value, 11½d. per lb.

4 F.

No. 4. Desirable; even combing; differing only from No. 3 in being a little lower. Spinning quality, 76s.; value, 11½d. per lb.

5 F and 6 F.

Nos. 5 and 6. Little longer; is dense, bold, lustrous; rather open noily tip. Spinning quality, 64s.; value, 10½d. per lb.

7 F, 8 F, and 9 F.

Nos. 7, 8, and 9. Showing less quality than previous; not so well grown; staple, full and even; good condition. Spinning quality, 60s.; value, 10d. per lb.

10 F, 11 F, and 12 F.

Nos. 10, 11, and 12. Combing, of medium length and quality; is soft, bright, pliable; excellent condition; will give a little noil. Spinning quality, 60s.; value, 10d. per lb.

13 F and 14 F.

Nos. 13 and 14. Much lower in quality, with hard rough tips; not so dense, but is bright and strong. Spinning quality, 56s.; value, 8½d. per lb.

*Stud Ewes.***15 F.**

No. 15. Nice lengthy combing, of good quality; soft, kind, elastic, good lustre, strong, sound; is a useful paying wool to grow. Spinning quality, 66s.; value, 11d. per lb.

16 F.

No. 16. Although a greater depth of staple, is a much lighter and more open; will not give the same weight per fleece; is lustrous, sound, kind; heavy, mushy, wasty tips. Spinning quality, 60s.; value, 10d. per lb.

17 F, 18 F, and 19 F.

Nos. 17, 18, and 19. Lustrous, deep grown combing; free, soft, pliable; evenly serrated. Spinning quality, 60s.; value, 10d. per lb.

20 F.

No. 20. Little thinner; shorter; much lower in quality. Spinning quality, 56s.; value, 8½d. per lb.

21 F, 22 F, and 23 F.

Nos. 21, 22, and 23. Bold, strong, free combing; lengthy staple of close lustrous wool; giving little noil; light in condition. Spinning quality, 56s.; value, 8½d. per lb.

24 F, 25 F, 26 F, and 27 F.

Nos. 24, 25, 26, and 27. Representing a deep strong combing; thick wavy staple; harsh wasty tips. Spinning quality, 50s.; value, 7½d. per lb.

Seventeen specimens from Jimbour, Darling Downs; owners, Darling Downs Pastoral Co.

28 F.

This once famous flock is fully represented by specimens of rams', ewes', and hoggets' wools, which are generally well grown and robust, sufficiently long for any manufacturing purposes, but are deficient in fineness, for which they were once renowned. The fibre is what is termed in the wool trade thick or broad, to a great extent caused by the very hard times experienced for about nine months on the Darling Downs, also, by not being suitably crossed, resulting in the fibre becoming hard and unkind to the feel, which detracts from its value and general manufacturing properties. This flock would be greatly improved by an introduction of either Mudgee, N. S. Wales, or Barunah Plains, Victoria, blood, which would produce a long silky soft type—the delight of users.

No. 1. Stud ram; lucerne fed; classed in the long, strong, deep grown type; staple is full, bold, even, and well proportioned, with nice wavy fibre; lustrous; in healthy, rich condition, with small black tips. Spinning quality, 56s.; value, 9½d. per lb.

29 F.

No. 2. Stud ram : lucerne fed : combing, with great depth of staple, which is bright, sound, free, and wavy : rather heavy in condition. Spinning quality, 56 s. : value, 8½d. per lb. The above two specimens stand out prominently in front of others from same station : are both showy and attractive wools.

30 F.

No. 3. Stud ram : lucerne fed : a bold strong bright combing : sound, free, wavy staple : little open and loose, with wasty mushy tip : will give little noil. Spinning quality, 56s. : value, 8½d. per lb.

31 F.

No. 4. Stud ewe, 12 months' growth : lucerne fed : much longer and deeper combing than other specimens : is sound, free, bright, and pliable : rather heavy in condition, with black yolky tips. Spinning quality, 56s. : value, 10½d. per lb.

32 F.

No. 5. Stud ewe, 12 months' growth : lucerne fed : not so bold in staple as No. 4, but equal in length, quality, and other respects.

33 F.

No. 6. Stud ewe, 12 months' growth : grass fed : robust, strong combing : a little open : hard feel : is very sound : condition heavy, with wasty tips. Spinning quality, 56s. : 10½d. per lb.

34 F to 40 F.

No. 7 to 13. Ewes, 12 months' growth : grass fed. These samples are similar in every respect, and evidently experienced hard times : are of medium length, open loose staple, with hard harsh noily tips. Spinning quality, 54s. : value, 8½d. per lb.

41 F.

No. 14. Ewe : grass fed : 12 months' growth. This specimen, on examination, shows the result of disease. To appearances, a bold lofty clothing : the fault is so apparent that many of the staples hang together only by a very few fibres, and part with the least pressure. Value, 6½d. per lb.

42 F to 44 F.

Nos. 15 to 17. Hoggets, station bred ; 12 months' growth : light-conditioned, deep-grown combing : is bulky in appearance, nice handling ; long, bright, wavy staple. Spinning quality, 60s. : value, 11d. per lb.

Thirty-nine samples from Ayrshire Downs, owners, Darling Downs Pastoral Co. (Country mostly open downs ; sheep running in large paddocks.)

72 F.

No. 1. Station-bred ram, progeny of Jimbour sheep : wool of medium length ; very soft, kind, elastic, bright, having an open wasty tips ; found generally grown in the tropics ; light in condition.

73 F.

No. 2. Stud ram, progeny of Jimbour sheep; resembling No. 1 in type, only little shorter.

74 F.

No. 3. Stud ram, progeny of Jimbour sheep; sound useful combing, of fine quality; nicely serrated and pliable.

75 F and 76 F.

Nos. 4 and 5. Progeny of cross-bred ewes by merino ram, probably of Jimbour blood, that first stocked the station. These samples show no trace of the cross, and may be passed as a medium class of merino; has great depth of staple; sound, dense, bright and soft, with open wasty tips. Spinning quality, 60s.; value, 10½d. per lb.

77 F.

No. 6. Maiden ewe, station bred; combing, of high quality; very close-woolled, finely serrated, kind to the touch, and even all through; earthy wasty tip. Spinning quality, 66s.; value 11d. per lb.

78 F.

No. 7. Maiden ewe, station bred; little lower in quality than No. 6; is a soft, dense, bright wool; open mushy tips. Spinning quality, 64s.; value, 10½d. per lb..

59 F to 62 F.

Nos. 8 to 11. Ewes, four-tooth; progeny of old Jimbour flock; station bred; a nice, even, dense, well-grown combing; finely serrated; pliable, kind to handle; open, earthy, wasty tips. Spinning quality, 66s.; value, 11d. per lb.

63 F to 67 F.

Nos. 12 to 16. Four-tooth ewes, station-bred; progeny of Jimbour rams and old Jundah ewes; very long combing, of nice quality; sound, finely serrated, having matted wasty tip, which will give much noil. Spinning quality, 60s.; value, 8¾d. per lb.

68 F to 71 F.

Nos. 17 to 20. Hoggets, progeny of Jimbour ewes; station bred; wool of very fine quality, showing much lustre; dense, finely serrated, soft, and elastic; much wasty noily tip, and shorter than any previous sample from this station. This style of wool is too fine for that district, the heat and dust having a damaging effect; is a fine carding wool, suitable for hosiery purposes. Value, 9½d. per lb.

45 F to 49 F.

Nos. 21 to 25. Hoggets, progeny of Tooralie (N.S.W.) ewes; station bred; are nice, bold, well-grown wools; good in quality, dense, bright, and even; is a very useful produce, suitable for the climate. Spinning quality, 60s.; value, 10½d. per lb.

50 F to 53 F.

Nos. 27 to 30. Hoggets, progeny of Jundah ewes; station bred; very even dense wool of medium growth; is soft, fine, and pliable; open wasty tips. Spinning quality, 64s.; value, 11d per lb.

54 F to 58 F.

Nos. 31 to 35. Hoggets, progeny of Rodney Downs station; ewes. This cross is very suitable to the district, and shows to greater advantage than any other cross tried at Ayrshire Downs. The wool is of much greater length than other specimens, also dense, therefore preventing the heat and dust from destroying the pure fibre far down the staple, which, when combed, will be of a most useful length, combined with quality, softness, and pliability. Spinning quality, 66s.; value, 11½d. per lb.

79 F to 83 F.

Nos. 36 to 40. Lambswool; station bred; very bulky and long; deficient in quality; rough hairy tips. Value, 7d. per lb.

Two samples of ewes' wool from Marathon Station, Hughenden, North Queensland.

84 F.

Station bred; long, strong, deep-grown for a merino wool, having the appearance of a cross-bred; is a useful and paying type, one that finds a ready sale; used in the medium worsted trade. Spinning quality, 50s.; value, 9d. per lb.

6.—NEW ZEALAND.

Case 13.

THESE wools, which were shown at the Colonial and Indian Exhibition, are of varied breeds, and fully represent the capabilities of New Zealand as a wool-growing country, ranging from a fine merino to deep-grown Lincoln bright-haired lustres; also many intermediate cross-breeds. The wools have a very healthy, sound appearance at all stages. The finest merino and coarse wools seem to prosper alike.

On account of the scanty particulars furnished with the samples, we are not able to give names of owners or stations; but they are arranged in qualities and nearest crosses, making the merino the foundation.

17,240.

No. 1. Wool of ram; resembling Western Victorian wool; the same broad bold type of fine silky combing, with nice lustre, serration, and clear sound fibre; of great elasticity; is very light in condition; trifle wasty tip. Spinning quality, 70s.; value, 1s. 1d.

17,267.

No. 2. Merino hogget ewe's greasy wool ; weight of fleece, $10\frac{1}{4}$ lbs. ; in very light condition ; this is a great weight, the wool being so clean ; is a little longer than No. 1, but with equally full, bold staple, of good lustre, and possesses a soft silky touch, not surpassed in the Museum. Will spin to high counts. Spinning quality, 100s. ; value, 15d.

17,236.

No. 3. Hogget ram's wool ; resembling South Australian, and comparing favourably in lustre, strength, and length ; is very light in condition ; slightly wasty tip ; weight of fleece, 12 lbs.

17,245.

No. 4. Wool of ewe hogget ; of great length ; rather thin in staple, which is bright, free, wavy, of fine quality ; soft ; pliable. Spinning quality, 70s. ; value, 11d. per lb.

17,234.

No. 5. Hogget's combing ; same particulars as No. 4 ; light in condition ; weight, 7 lbs.

17,261b.

No. 6. Merino hogget ; greasy ; short, but a full, bold, bulky staple ; is soft, kind, finely serrated, and very pliable ; real type of hosiery wool.

17,261a.

No. 7. From same flock as No. 6 ; of equal length ; wavy, lustrous, staple ; handles lofty, soft, full ; little lower in quality ; a hosiery wool. Value, $10\frac{1}{2}$ d.

17,250.

No. 8. Wool of wether ; weight, $8\frac{1}{2}$ lbs. ; soft, light, bright, lustrous, thin staple ; of great fineness ; the smallest fibred wether's wool in the Museum ; a delicate wool all through. Spinning quality, 78s.

17,262a.

No. 9. Wool of wether ; much shorter and lower than No. 8 ; very light and thin ; wavy staple ; hosiery wool. Value, $10\frac{1}{2}$ d.

17,257.

No. 10. Half-bred ewe's wool (merino and Shropshire) ; combing, of great length ; will compare favourably with the greater part of South Australian merino wool in any particular as a commercial wool. Will spin to 60s. ; value, 11d.

17,241.

No. 11. Half-bred hogget (merino and South Down) ; showing more of the cross ; is long stapled ; has hairy white top ; is thin and light in condition ; has fine, silky, soft, elastic fibre ; will waste when combed. Spinning quality, 54s. ; value, $9\frac{1}{2}$ d.

17,229.

No. 12. Half-bred wool of hogget (Leicester and merino); of good length; hard, harsh curl; very free; may be termed demi-lustre, or half lustre. Spinning quality, 40s.; value, 10½d. This style of wool is used mostly in the Bradford stuff trade in fabrics made of English wools.

17,248.

No. 13. Half-bred wether's wool, hogget (merino and South Down), is a short light wool, not of twelve months' growth; is a very fine, light, bright, useful looking wool for making tweeds, &c. Value, 9½d. per lb.

17,239.

No. 13. Cross-bred lamb's wool (merino and Leicester); very short, with good lustre. Value, 7d.

17,253.

No. 15. First specimen of the true lustre wool, from Lincoln ram; weight of fleece, 18½lbs.; certainly hogget; as a perfect type, stands at the head of that class of deep grown wool in New Zealand; the staple is of great length—12 inches; very weighty; of silvery lustrous fibre; very strong, pliable; handles softer than the Lincoln wool grown in England—a special feature in all kinds of wool from any class of sheep descendants of English breeds produced in Australasia. This fact places these wools in a better position with the manufacturers, who will give from ½d. to 1d. per lb. more for the same quality than for the Home wools, on account of the goods, when finished, having a kinder and softer touch, which alone enhances the value. Spinning quality, 34s.; value, 11½d. per lb.

17,233.

No. 16. Lincoln ewe hogget's wool; is much bolder than No. 1, but lower in quality, though equal in lustre and softness. Spinning quality, 34s.

17,258 A.

No. 17. Lincoln ram's wool; weight of fleece, 18½ lbs.; very low or coarse, with heavy staple, which will waste much when combed. Spinning quality, 28s.

17,252.

No. 18. Wool of Lincoln ewe; weight of fleece, 20 lbs.; is a very soft, silky wool of good quality and beautiful silvery lustre; as a ewe's wool, takes premier position. Spinning quality, 36s.; value, 11d.

17,263.

No. 19. Lincoln wether (hogget) wool; bright, lustrous, with kind, silky, soft staple; of good length; is free and sound, giving very little waste. Spinning quality, 34s.; value, 10½d.

17,244.

No. 20. Hogget's (ewe) wool (Lincoln); very thick, long-stapled, and lustrous; will waste a little. Spinning quality, 34s.; value, 10½d.

17,255.

No. 21. Border Leicester ram's wool; is also of the lustre type, and considered equal to the Lincoln, very often giving much more quality. This is a low specimen, but equal in all respects to the Lincoln wools. Spinning quality, 34s.; value, 10½d.

17,262 B.

No. 22. Romney Marsh ewe's wool; another type of the great lustre family, which does not grow the length of the above-named; is very often finer, and of equal lustre, strength, softness, and pliancy. Spinning quality, 34s.; value, 10½d.

17,231.

No. 23. Romney Marsh wether; being a better representative than No. 22; is a bold, full-stapled wool; soft, wavy staple; very elastic, and of silvery brightness; will give full weight in sliver. Spinning quality, 36s.; value, 10¾d. per lb.

17,246.

No. 24. Romney Marsh ram (hogget); long wavy staple; very free, bright, and of hard touch. Spinning quality, 36s.; value, 10½d.

17,262.

No. 25. Romney Marsh ram's wool; weight of fleece, 16¼ lbs.; is very long, and strongly inclined to fuzzyness; will waste much. Spinning quality, 28s.; value, 8d.

17,243.

No. 26. Washed Romney Marsh wool (hogget); probably from same flock as No. 24; has a hard brittle feel. Spinning quality, 36s.; value, 14½d.

17,265.

No. 27. Romney Marsh lambs (greasy); a very bright, silvery, lustrous wool; soft, kind to handle, bold, and bulky. Value, 13½d.

17,264.

No. 28. A pure lustre, from Leicester hogget; it was labelled "cross-bred," but this is a mistake. Spinning quality, 34s.; value, 9½d.

17,249.

No. 29. Cross-bred wool (lustre cross on both sides); this may be termed a lustre, taking much after Gloucester, and coming under the head of demi-lustre. Value, 9½d.; spinning quality, 32s.

17,229.

No. 30. Cross-bred wool (Lincoln cross); is a deep-grown, strong, low combing; classed as lustre. Spinning quality, 30s.; value, 9½d.

[All the abovementioned wools (Nos. 15 to 30) are used mostly in the Bradford worsted stuff trade.]

17,266.

No. 31. Half-bred ram's wool (Leicester and merino); classed as a demi-lustre; a combing of greath length and wavy staple, with a thick, heavy, wasty, noily top. Spinning quality, 36s.; value, 9d.

17,237.

No. 32. Cross-bred ewe; 10½ lbs. weight of fleece; a light, bright, long-stapled wool (probably a Cheviot-merino cross), with soft, kind touch. Value, 11½d.; spinning quality, 40s.

17,268.

No. 33. Half-bred ewe hogget's wool; weight of fleece, 11½ lbs.; this sample might be placed with the good Leicester, which type it bears all through. Spinning quality, 36s.; value, 11d.

17,259.

No. 34. Cross-bred ewe hogget (Leicester-merino); is of nice medium length; of beautiful wavy staple; very soft and pliable; a demi-lustre combing. Spinning quality, 40s.; value, 11d.

17,251.

No. 35. Cross-bred hogget wool; weight of fleece, 10¾ lbs.; very light in condition; broadly serrated staple of good length; a wool that will comb badly, and give little top. Spinning quality, 40s.; value, 8d.

17,254.

No. 36. Shropshire Down ram hogget combing wool of good length; a bold, bulky wool; with well-serrated staple; is soft and kind to handle; will give little noil. Spinning quality, 48s.

17,230.

No. 37. Shropshire Down hogget; a very inferior specimen of wool of that class; is too coarse and hard; faulty, fuzzy, rough, open tip; heavy condition; used for low blankets, carpets. Value, 7½d.

17,260.

No. 38. Half-bred hogget's wool (merino and a Downs cross); is a light, fuzzy, loose wool; wasty; used in low hosiery trade. Value, 10d. per lb.

17,235.

No. 39. Hampshire Down hogget's wool; a low specimen, and not fairly representative; has a harsh, rough staple; coarse and open light tip. Value, 10½d. per lb.

17,232.

* No. 40. Hampshire Down ram's wool; much lower in quality, but better grown wool than No. 39; good length of staple, which is compact; has a hard, unkind feel; might be used as a demi-lustre. Value, 10½d. per lb.

17,256.

No. 41. Shropshire Down ewe's wool; this specimen has been labelled wrongly, as it is evidently related to Hampshire Downs wool, although not an average one; is too long, hard, and coarse.

17,247.

No. 42. Shropshire Down ram's wool; a low, open, fuzzy carding, with rough, wasty, harsh staple; not a good specimen.

17,247a.

No. 43. Shropshire Down ram's wool; short; of low quality; thick wiry hair; inferior clothing. Value, 8½d. per lb.

17,258.

No. 44. South Down ewe's wool; an inferior specimen; too fuzzy, with curly, harsh hair; low clothing. Value 9d. per lb.

17,269.

No. 45. South Down ram's wool; similar to last specimen. Value, 8½d. per lb.

17,261.

No. 46. Cross-bred ewe's wool (merino ewe and Lincoln ram); a strong, sound, free, demi-lustre combing, in light condition, showing much lustre. Spinning quality, 34s.; value, 10½d. per lb.

7.—CAPE COLONY AND NATAL.

Case 13.

THE following wools were shown at the Colonial and Indian Exhibition, London, 1883. All of them show great neglect and poor growth. They are of no type, and may be classed as inferior clothing wool, mostly short and tender; run through with a kemp, and if not picked out, since they do not take dye, will produce faulty fabrics. They form an indifferent milling wool, but possess a fair, bright colour. They are generally used in making yarns for shawls and other goods, where felting is not essential. Sometimes this wool is blended with others possessing strength and elasticity of staple, in producing small yarns for twisting purposes.

17,275.

No. 1. Wool of French Rambouillet ram, from W. Watson, Esq., Newborough Grange, Byrne, which was a breed formerly greatly appreciated in these Colonies. This sample does not give an idea of a classic wool, being short, fuzzy, with curly hair; coarse for a merino clothing wool; of hard touch; not a good felting wool; used mostly in shawl yarns.

17,282.

No. 2. German Rambouillet ram's wool, from W. Watson, Esq., Newborough Grange, Byrne. A much superior specimen, although with hard, wasty tip: the fibre is very delicate, soft, silky; rather thin in staple.

17,264a.

No. 3. Western fleece clothing wool; is very short; no longer than most lambs' wool of Australia; fine, bright, with wide, open serrations. Value, 7d.

17,270.

No. 4. Ewe's wool, from Natal; carding wool; open, loose, with fuzzy staple. Value, 6d.

17,271.

No. 5. Wether's wool, from Natal; carding wool for hosiery purposes; very bright, with small serrations; hard feel. Value, 6½d. per lb.

17,265a.

No. 6. Ewe's wool, Natal; very close, compact, carding wool; very fine small hair, and wasty. Value, 6½d. per lb.

17,283.

No. 7. Merino ewe's wool (P. H. Van Rooyer, Esq., Greytown); clothing wool; hard, small, and wasty. Value, 5d. per lb.

17,284.

No. 8. Same owner and remarks as No. 7. Value, 1d. per lb.

17,262b.

No. 9. Greasy clothing wool; is hard, wasty, of inferior quality. Value, 6½d. per lb.

17,278.

No. 10. Ewe's wool (combing); very small, fine fibre; finely serrated, with little, wasty tip. Value, 8½d. per lb.

17,287.

No. 11. Merino wool: greasy, short clothing; small sort; light in condition. Value, 6½d.

17,276.

Nos. 12 and 13. Two samples of belly wool in grease; short, fuzzy hair; wasty; a blanket or rug wool.

17,266a and 17,286.

Nos. 14 and 15. Cross-bred Leicester-merino; of medium length; open, coarse; wasty all through; will comb. Spinning quality, 36s.

17,279.

No. 16. Described as lamb's wool; 12 months' growth, which must be corrected. This specimen has lost all trace of lamb's wool, being a fully-developed hogget's wool; is much longer than most other samples of older growth; is a very small-fibred combing wool; finely serrated; very wasty, with softer touch than other wools from this part of the world. Value, $7\frac{1}{2}$ d.

17,277.

Nos. 17 and 18. Ewe's wool, from P. H. Van Rooyer, Esq., Greytown; clothing; same particulars as No. 16.

No. 19. Same owner as No. 17. Ewe's combing; of fair length, nice colour; unkind, hard feel, with open, fuzzy tip. Value, 8d.

17,268a.

No. 20. From T. K. Taylor, Esq., Greytown; sent as lamb's wool; is a long-stapled wool (hogget), and by far the longest in the Cape wools here; of fine quality; much softer to handle than most of these wools; wasty, open tip; will give much noil. Value, $8\frac{1}{2}$ d.; combing quality, 50s.

17,279.

No. 21. From G. H. Van Rooyer, Schoongesicht, Greytown; lamb's wool; short, and of low quality. Value, $4\frac{1}{2}$ d.

17,285.

No. 22. Lamb's wool, from T. K. Taylor, Esq., Greytown; little finer than last sample. Value, 5d.

17,283.

No. 23. Ram's wool, from T. Foster, Esq., Stainton, Tkopo; very well grown combing; of good quality; bright, bold staple; finely serrated; rough, open tip. Value, 8d.

No. 24. Ewe's wool; same owner as No. 23; low, rough wool; very wasty, fuzzy staple. Value, 6d.

17,281.

No. 25. Merino ewe's wool; P. H. Van Rooyer, Esq., Greytown. Short, fine, small, clothing wool; light in condition; value, 7d.

No. 26. Scoured wool; clothing; a very good colour; well got up; still retaining that hard feel so noticeable in the Cape wools. Value, 1s.

No. 27. Like No. 26; showing the combing sort. Value, 14d.

17,267a.

Nos. 28 and 29. Scoured wools, by Messrs. Hack Bros., Umgeni Works, Durban; very well got up in all respects; a clothing wool. value, $16\frac{1}{2}$ d.

17,269a.

Nos. 30 and 31. Two samples of Cape mohair, from J. Gibson, Esq., Pietermaritzburg, Natal. A fair average hair from the Angora goat; is classed as lustre; pretty free from kemp; of nice length; silvery

lustre; soft and silky; used in the Bradford worsted trade. Value, 13d. per lb. These mohairs have been sold in large quantities at 4s. 8d. per lb. More particulars are given when treating of the Asiatic Angora goat.

17,274.

No. 32. One sample of mohair from G. H. Wright, Esq., Lady-smith; a very long combing; runs much with kemp, which takes from the value; not so good as last samples. Value, 12d.

17,288.

Nos. 33, 34, and 35. Cape mohair, of very inferior stamp; cotty or matted, and kempy, but well-grown: will waste much when combed. Value, 9d. per lb.

RAW EUROPEAN MERINO WOOLS, Saxony (Full-blooded.)

Descent and breeding of the full-blooded merino sheep
of Leutewitz, near Meissen on the Elbe. Proprietor,
Otto Steiger.

THROUGH the kindness of Mr. L. Breymann, the Australian agent for Mr. Steiger, I was permitted to select specimens of wools from fleeces (non-competitive), exhibited at the late Melbourne International Centennial Exhibition, which form a most valuable educational addition to the collection at the Museum. These wools are from sheep which have gained highest classical honours in Europe, and represent a type very different to our Australian merino—the one being fine, short, dense, heavily-laden, with fatty yolk; whilst high-class Colonial wools have greater length, with equal fineness and density. For manufacturing purposes, the Saxony produce is highly-esteemed by the makers of superfine broadcloths in the West of England, who import it largely from Germany.

The following interesting particulars of this aristocratic stud are taken from a pamphlet kindly given by Mr. Breymann, which will be of great interest to many of our stud-masters:

The full-blood merino flock of Leutewitz descends from the thoroughbred merino flock of the Prince of Reuss, at Klipphausen, Saxony. The latter was composed of that stock of sheep from the best breeds of Spain, which the Elector Frederick August, of Saxony, had been presented with, by King Charles III of Spain.

"On the 31st July, 1765 (Extract from the "Archives of the Administration of Saxon Dominion"), ninety-two rams and 128 ewes arrived at Dresden, accompanied by Spanish shepherds, and having been led before the Electoral family, were brought to the domain of Rennersdorf, whence the noblest stock was afterwards removed to the domain of Lohmen. Some of them were distributed among the most considerable manors of Saxony.

"The extraordinary success of these breeding sheep farms induced another purchase of sheep in Spain in 1778, which, however, did not obtain the general approbation of that period, though it more and more animated the improvement of sheep. At this time, considerable importations of Spanish merino-sheep had taken place in Austria, and almost at the same time, or soon after, in Prussia, specially by Mr. Von Vinke, President of Government. In Silesia and Austria, particularly in Moravia, important advances were made in the breeding of sheep. Men of importance and high rank took an interest in it, especially in Saxony. In this country, the proprietor of Klipphausen, Baron Fletscher, Privy Councillor, was the first who improved his flock by four rams taken from those which were imported in 1765, and by a stock of two rams and twenty-two ewes, a present from the Elector of Saxony, from the stock of 1778. After the death of Baron Fletscher, and of his daughter, the Countess of Reuss, His Serene Highness the Prince of Reuss took possession of Klipphausen, by whom his stock of sheep were carefully bred, and became exceedingly famous.

"The Leutewitz full-blood flock descends from this breeding stock of Klipphausen. Christian Steiger bought his ewes and rams at Klipphausen in the year 1805 and 1806, and, attaching a high value to the breeding of full-blood merino sheep, raised the flock till 1819. From this time, his son Christian Adolph Steiger received the flock, who was ranked with the most celebrated flocks of Germany.

"From 1834 to 1875, the son of Christian Adolph, viz., Adolph Steiger, a perfect connoisseur of the history of sheep-breeding, bred the flock at Leutewitz. Then Otto Steiger became proprietor of Leutewitz, and endeavoured to improve the flock on the same principles. For above eighty years this family has engaged in breeding full-blood merino sheep at Leutewitz, and for a century it has flourished in Saxony, which, as is well known, in this respect, holds the premier position in Germany. Messrs. Steiger, after many years' experience in sheep-breeding, came to the conclusion that, to produce a sheep that would grow a high class wool, with its beautiful serration, elasticity, and silkiness, and at the same time an animal of large body for meat purposes, would be of the greatest advantage, claiming especially that the wool grows much better, and gives heavier fleece, than if grown on a smaller sheep with wrinkly skin.

"The Leutewitz sheep first came into notice in the show-yard at Dresden, 1852, gaining second prizes only.

"At exhibitions at Melbourne and Sydney, two Leutewitz rams are stated by Mr. Steiger to have taken first prizes, and to have been profitably sold at the time. The first ram, No. 204 (Wellington), perfectly representing the object of the breeder at that time, was bred from a stud ewe, No. 204, and sired by stud ram, No. 146.

"The great Australian sheep breeder, Mr. M'Arthur, had an especial desire to purchase that ram (Wellington), and offered a high price, which was not accepted.

"We next find this breed in competition at Battersea Park, London, 1862, and obtained several prizes, and sold one of rams, No. 20, grandson of Wellington for £400, and two others for £300, to go to Australia. Many have since been exported to these Colonies, the Cape Colony, and America.

"At Dresden, 1865, the Leutewitz sheep were shown with great success, and out of eight exhibited lots, gained eight first prizes and three seconds, and found ready purchases for Silesia and Australia."

365 F.

No. 1. Extra stud ram, No. 25; 285 days' growth (1884); weight of fleece, 10 kilograms, or 22 lb. 2 oz. This sample is a little longer than most Saxony wool, and could be easily combed; stands as a superior quality; would not spin any finer yarns than some of our Australian specimens, which are much longer; is bright in appearance; not so bright as to class it a lustrous wool; has great density; the staple is even, sound, free; would not call it a silky wool, not possessing that softness to the feel, so noticeable in some of our Tasmanian and Victorian flocks; the staples are free from wasty fibres, carrying a black yolk tip; not so heavy in condition as most of this type of wool; taking the weight of fleece and length into consideration, density is a remarkable feature. Spinning quality, 120s.; value, 14d. per lb.

366 F.

No. 2. Extrastud ram, No. 245; 285 days' growth (1884); weight of fleece, 10 kilograms, or 22 lb. 2 oz.; not so long as No. 1; shows more brightness; great density, evenness, soundness; the staple is free, beautifully serrated, kind, in light condition; most wonderful weighty wool, considering length and condition; is a perfect clothing wool. Value, 15d. per lb.

367 F.

No. 3. Stud ewe, No. 188; 285 days' growth (1884); weight of fleece, 9½ kilograms, or 19 lb. 1½ oz.; very small, fine, clothing wool, giving a great weight of heavy yellow yolk, with black tips; the wool is dense; softer than the rams, showing finely-serrated staple; will lose much in washing. Value, 11d. per lb.

368 F.

No. 4. Stud ewe, No. 120; 285 days' growth (1885); weight of fleece, 7 kilograms, or 15 lb. 7 oz.; pure; fine clothing; small wavy staple; full, dense, heavy; in a brown yolk condition, with dark black tips; will shrink much in scouring. Value, 11d. per lb.

369 F.

No. 5. Stud ewe, No. 126; 285 days' growth (1885); weight of fleece, 9 kilograms, or 19 lbs. 11 oz.; is a great resemblance to No. 4; the same remarks apply.

370 F.

No. 6. Stud ewe, No. 146; 285 days' growth (1886); weight of fleece, 8½ kilograms, or 18 lb. 11½ oz.; specimen showing a much bolder type; longer in staple, which is even; bold, bulky, fine, and dense; little noily tip; if combed would waste; most useful as a carding wool; heavy in condition. Value, 11½d. per lb.

Pure full-blood Saxony merino, bred by Carl Podlech, Mollienhnen, East Prussia; presented by Mr. L. Breymann, Adelaide, S.A.

These wools are specimens from sheep representing the Electoral breed, known by their very short fine clothing sorts; are high classic types, and great prize winners.

371 F.

No. 1. Extra stud ram, "Fold"; Gold Medal, Paris, 1867; two First-class, Konisburg, 1869; fine clothing; highly appreciated by super-fine broadcloth manufacturers; it is extremely small and fine, and carries great density; is soft, kind, and pliable, which is generally wanting in this type; the fibre is delicately formed, but sound, whilst the serration is extremely small; the wool is bright; in perfect condition; small black tip, with rich creamy tinge all through; one of the most perfect clothing wools. Value, 14½d. per lb.

372 F.

No. 2. Extra stud ram, 1½ years; two prizes, Mollichnen, East Russia, 1887 and 1888; this sample competes favourably with No. 1; is a little lighter in condition; a perfect clothing wool. Value, 14½d. per lb.

Pure full-blood Saxony merino, bred by Otto F. von Cheerscheidt, Hüllesen, Germany; presented by Mr. L. Breymann, Adelaide, S.A.; representing the pure Negretti type.

373 F.

No. 1 stud ram, No. 40; 280 days' growth; weight, 10½ kilograms, or 23 lb. 3½ oz.; very superior combing, of medium length; is of great density, which is the principle feature; fairly bright; the staple very even; pure throughout; beautiful small fibre; finely serrated; is soft, silky, free, kind, elastic; will give a splendid stylish sliver; in a rather heavy condition. If combed, would spin to 160s.; value, 15d. per lb.

374 F.

No. 2. Stud ram, No. 50; 280 days' growth; weight of fleece, 8½ kilograms, or 18 lb. 1½ oz.; clothing wool, of a much lower quality than any specimen in this collection of Saxony wool; the staple is wavy and free; is little harsh; very heavy, brown, yolk condition; will lose greatly in scouring. Value, 9½d. per lb.

Two samples of lambs' wool, bred by — Klingbeich; presented by Mr. L. Breymann, Adelaide, S.A.

375F and 376.

These samples show great similarity, and might be from the same sheep; are nine months' growth, which is an exceptional age to shear lambs; the wool is extremely short, although fine; by far the heaviest yolked wool in the Museum; if scoured, would lose fully 75 per cent. Value, 7½d. per lb.

Wool bred at Shomöller, Germany; presented by Mr. L. Breymann, Adelaide, S.A.

Three samples represent a stronger style of Saxony wool, probably Rambouillets.

377 F.

No. 1. Stud ewe, No. 136; two years old; shorn 3rd April, 1887; a very dense combing, of useful length; is a bright, silky wool; soft and pliable; the staple full, bold, wavy, pure, sound, free; little earthy tips; in desirable condition; will give good weight when combed. Spinning quality, 90s.; value, 13d. per lb.

378 F.

No. 2. Stud ewe, No. 136*; two years old; shorn 3rd April, 1887; little shorter than first sample; has more quality, equal in density; is soft, free, sound; distinct serration; soft, elastic, grand, rich condition. Spinning quality, 100s.; value, 14½d. per lb.

379 F.

No. 3. Stud ewe, No. 120; two years old; shorn 3rd April, 1887; the deepest-grown combing in this lot; staple long, strong, with good quality; is close, kind, pliable; a most desirable wool to grow. Spinning quality, 86s.; value, 13d. per lb.

PHOTOGRAPHS OF STUD MERINO SHEEP.

(New South Wales, Tasmania, and Saxony.)

Nos. 1-6. Stud rams from the Springfield flock, Goulburn, New South Wales; owner, A. L. Faithfull, Esq.

No. 1. Stud ram, "Grand Duke"; sold for 490 guineas.

No. 2. Champion ram, "Royal Duke, 3rd."

No. 3. Stud ram, "Dense Grand Prince"; Champion, Wagga Wagga, New South Wales, 1885.

No. 4. Stud ram, "Victor A Prince 2nd."

No. 5. Stud ram, "Remus."

No. 6. Stud ram, "Remus 2nd."

No. 7. Tasmanian stud ram, "Majenta II"; W. Bennett, Esq., Bloomfield, Ross, Tasmania.

No. 8. Tasmanian stud ewe, from W. Bennett, Esq., Bloomfield, Ross, Tasmania.

Photographs of full-blood Saxony merino sheep, bred by Mr. Otto Steiger, Leutewitz, near Meissen on the Elbe, Saxony (Germany).

No. 1. Stud ram No. 204, "Wellington"; born 1854; sire "No. 146"; First Prize, Paris, 1856; sold Count Thun, Bohemia, for 2,000 florins.

No. 2. Stud ram "No. 145"; born 1882; sire "No. 29"; sold to South America for 3,000 marks, 1884.

No. 3. Stud ewe "No. 815"; born 1883; sire "No. 219."

No. 4. Flock of stud rams on the Leutewitz sheep breeding farm.

No. 5. Flock of stud ewes on the Leutewitz sheep breeding farm.

3.—MISCELLANEOUS RAW WOOLS.

MISCELLANEOUS COLLECTION OF WOOL AND HAIR.

THIS is one of the most varied collections in the Museum, showing different types grown in all climates and many quarters of the world, the produce of sheep, goats, camels, alpacas, which give a comprehensive insight into the requirements of manufacturers. A great variety of goods, used for the comfort and adornment of the human race, is made from these raw materials. Shown at the Colonial and Indian Exhibition, London, 1886.

17,311.

Nos. 1 and 2. Commercial wool from Tasmania; a carding wool; rather short in staple; bright, wavy, free; of good quality; used for hosiery goods. Value, 10d.

No. 3. Showing britch from No. 2; is a great contrast; the sample is very low, and not up to the general standard of low parts of Tasmanian wools. Value, 4d.

17,315.

No. 4. Part of fleece or matching of a Spanish merino (grown in Spain); is very heavy and dirty, with short fuzzy open wool; also wasty; not to be compared with the short wools grown in the Colonies. Value, 4½d.

No. 5. Showing back part of fleece; thin, wasty, open, with hard curly harsh feel. Value, 4d.

No. 6. Britch, from No. 4; a low, coarse, strong staple; wasty. Value, 3½d.

No. 7. Pieces or skirtings from above; heavy in condition; will waste much; used in blankets, tweeds, &c. Value, 3¼d.

17,302.

No. 8. Indian wool, probably a whole fleece; illustrates the way such wool is sent to market in many instances; is a gray wool (hoggets), used in low woollen trade, coarse blankets, rugs, and carpets. Value, 7d.

17,312.

No. 9. Wool from the Falkland Islands, resembling Scotch wool; is long, with very wiry coarse top, but handles well for a low wool, which will comb. Spinning quality, 28s.; value, 7d.

No. 10. Britch, from same fleece as No. 9. Spinning quality, 24s.; value, 5½d.

17,310.

No. 11. Canadian wool; a long strong lustre wool; very hard wavy staple; is a good specimen of wool grown in that Colony. Spinning quality, 34s.; value, 9½d.

17,298.

No. 12. White Indian wool, from Bombay Chamber of Commerce; this sample may almost be termed hair, from its thick, coarse, hard, straight fibre; is largely exported to England and sold to the carpet manufacturers.

17,308.

Nos. 13 and 14. Yellow Indian; particulars as No. 12. Value, 6 $\frac{1}{4}$ d.

17,303.

No. 15. Ionic wool, of reddish colour, with short staple; rather bright, light. Value, 7 $\frac{1}{2}$ d.

17,296.

No. 16. Indian wool, reddish colour; very short, mushy, hard wool. Value, 6d.

17,309.

No. 17. Yellow Indian wool; low, rough, and hard. Value, 5d.

17,289.

Nos. 18 and 19. White East Indian; washed, bulky; may be called fine for this class of wool. Value, 10d.

17,292.

Nos. 20 and 21. East India; lower in quality. Value, 8 $\frac{1}{2}$ d.

17,291.

Nos. 22 and 23. East India; very bitty, little sort; coarse and hard. Value, 6 $\frac{1}{4}$ d.

17,301.

Nos. 24 and 25. East India yellow. Value, 8 $\frac{3}{4}$ d.

17,294.

Nos. 26 and 27. East India yellow. Value, 6 $\frac{3}{4}$ d.

17,308.

No. 28. East India yellow. Value, 5 $\frac{3}{4}$ d.

17,295.

No. 29. Indian grey wool. Value, 9d.

17,314.

No. 30. Mogadore, Morocco, scoured; is a decided improvement on previous samples of this type of wool; has little trace of that straight hard hair and coarseness so prominent in all neglected wools grown in tropical climates. The wool fibre in this sample is very small, with fine serration; has a kemp running through; hard coarse tip. Value, 11d.

17,295a.

No. 31. Indian grey wool ; much longer grown than most specimens from that country ; is composed of a fine-woolled fibre of thick hard hairy formation. Value, 9d.

17,293.

Nos. 32 and 33. Russian camel hair ; two shades of brown—light, and dark ; as a fibre, is extremely soft, silky, kind to handle, with a strong thick hair running through ; of various qualities ; when carefully sorted, the fine sorts are very valuable, being made into fabric, much resembling silk ; the noils are used in the woollen trade ; the great bulk of this produce is used in Bradford, and employs a great number of hands ; the sorting is so carefully done that a man will only sort from 35 to 50 lbs. per day. Value of sample, 9d.

17,304.

No 34. East Indian wool ; fawn, greasy ; is a very rough hard wool. Value, 6d.

17,290.

No. 35. East Indian brown grey wool ; sort higher than 34. Value, 6½d.

17,303a.

No. 36. Indian white and fawn wool, of very fine quality ; greatly resembling down ; is in little round balls, and appear to have been picked specially out of other sorts. From my own experience, I would call it the produce of the Cashmere goat. This opinion is substantiated on reference to several works relating to that particular animal. The specimen when opened out does not resemble either wool or hair, being destitute of the undulating curves, which are the true distinction between the two. The finest only grows on certain parts of the goat, from which are made the fine Cashmere shawls, which are unrivalled for texture, colour, and design.

17,306.

No. 37. East Indian wool ; a great mixture of a fine, silky, soft fibre, and a long strong hair of white and brown colour. This specimen is from the Thibet sheep. When the long coarse hairs are carefully taken out, the brightest quality is made into fine Indian shawls.

17,307.

No. 38. East Indian ; certainly from Deccan sheep ; is black, short, hard, and of hairy growth.

17,316.

No. 39. Brown wool from Bagdad, Asia Minor ; of great length, but low or coarse, and resembles wool more than any other Asiatic breed. Value, 8d.

The Syrian sheep are supposed to be descendants of the sheep mentioned in ancient times, and one writer mentions that they have probably made little improvement since the time of Abraham. The great peculiarity of this sheep is its great weight of tail, which sometimes weighs from 30 to 40 lbs., and it is therefore called the fat-tailed species. Very large quantities are exported from Bagdad. The breed is found in all parts of Asia, as far as China.

17,317.

No. 40. Alpaca, brown, from South America. Value, 13d.

As this is not by any means an average specimen, particulars will be given with other samples.

Hair.

Small collection of various kinds of hair.

Nos. 1 and 2. Black alpaca from Peru, South America. The alpaca is one of the most interesting animals, producing a hair that is used in the manufacture of goods, which have taken a foremost position as ladies wear. The wool is renowned for its great length and fineness, silky texture, and silvery lustre. If the animal is shorn each year, the length of staple reaches 8 inches, but if allowed to grow it may acquire a length of from 20 to 30 inches. The wool is produced in many colours—fawn or yellowish brown, black, grey, and white. This wool was first made into textile fabrics by the late Sir Titus Salt, and has ever since been one of the principal branches of the Bradford trade.

No. 3. Brown alpaca. Price of alpaca at present, 12d. to 13½d.

No. 4. Mohair, which is grown in Asia Minor, from the Angora goat. The fleece is of true wool, since it possesses a curly structure, with a fine serration; bright silvery lustre. It is used in Bradford in great quantities, one firm employing alone from 350 to 400 sorters, which only represents a small portion of the trade. On account of its various qualities, I have known as many as twenty-four different sorts to be made. This wool at one time was sold as high as 4s. 4d. per lb., and in great quantities. Value at present averages 12½d. to 14½d. per lb.

No. 5. Cape mohair, showing much lower quality, touched with grey hairs.

No. 6. Mohair grown in Queensland, is very open and fuzzy with kemp.

Nos. 7 and 8. Camel's hair (China), white and brown; is much smaller and finer than Russian camel's hair. Value, 7d. Is combed and made into linings for wearing apparel; the noils are made into carpets, &c.

Nos. 9 and 10. Two samples of kid mohair; same relation to the product of the older animal as lambswool to that of the sheep; grown near Wilcannia, New South Wales; presented by Mr. P. Mathers. Value, 15½d. per lb.

No. 11. White cashmere, from Cashmere goat, and made into fine shawls.

No. 12. Black East Indian wool; is a very strong wiry specimen, resembling hair; used for carpet-making.

A miscellaneous collection of wools, &c., intended to illustrate many of the terms employed in the wool trade; presented by Messrs. W. H. Chard & Co., Sydney.

A.—Australian.

2,940.

Nos. 1, 2, and 3. Superior Australian combing wools, of good growth; bold bright staple, and a high class wool all through. Value, 12d. per lb.; spinning quality, 70s.

No. 4. Superior hogget clothing; very small, fine, light-conditioned wool; bright, finely serrated. Value, 10d. per lb.

Nos. 5 and 6. Very nice light-conditioned combing; bright, with little wasty tip. Spinning quality, 54s.; value, 9d. per lb.

No. 7. A fine clothing; heavy in condition. Value, 8½d. per lb.

No. 8. Merino hogget; carding wool; very fuzzy, open, and light. Value, 8d. per lb.

No. 9. Merino combing wool; very medium length, and loose, curly fibre; wasty. Value, 6½d. per lb.; spinning quality, 56s.

No. 10. A bold bright clothing. Value, 8d. per lb.

No. 11. Medium clothing; short, rough, coarse tip. Value, 6½d. per lb.

No. 12. A red combing wool, with broad wasty tip; better adapted for carding. Value, 7½d. per lb.

No. 13. Small little fine clothing; will make into the finest broad or billiard cloths. Value, 9d. per lb.

2,949.

Nos. 14, 15, and 16. Burry, seedy, and moiety; short wools. Value, 5d. per lb.

No. 17. Merino, black and brown, wools; clothing. Value, 5d. per lb.

No. 18. A very superior lamb's wool, short and small, of very bright colour and light. Value, 9d. per lb.

No. 19. Greasy merino lambs; very little and heavy. Value, 5d.

No. 20. This is a mixed sample—fine clothing wool and cross-bred.

Nos. 21 and 22. Low cross-bred, thick haired, open; and fuzzy, with wasty wild top. Value, 7d. per lb.; spinning quality, 36s.

No. 23. Cross-bred lambs; very good sample, indicating Leicester cross; showing good lustrous, bold staple; little thin bright tip. Value, 8d. per lb.

No. 24. Superior merino combing, of fair length; very good colour; washed. Spinning quality, 66s.; value, 16d. per lb.

No. 25. Merino washed clothing wool; fine, bright, lofty wool; well washed.

No. 26. Hogget's wool, washed; of good quality; a wasty wool; will give much noil. Spinning quality, 64s.; value, 14d. per lb.

No. 27. Washed merino, of low quality; medium length of staple, with fuzzy tip. Spinning quality, 58 s.; value, 12d. per lb.

No. 28. A well-washed, bright clothing, of good quality. Value, 16d. per lb.

No. 29. Washed carding wool; rather short for combing, as labelled; not so good colour as previous specimen. Value, 10½d. per lb.

No. 30. Superior clothing wool, washed, fair colour. Value, 14d. per lb.

No. 31. Very inferior washed clothing; bold, lofty wool; will lose much when washed. Value, 8d. per lb.

No. 32. Washed merino pieces; very little, bitty, and not an average specimen of first pieces. Value, 9d. per lb.

No. 33. Merino washed locks; inferior specimen; very bitty; much mixed with black. Value, 6d. per lb.

No. 34. Skin cut from sheep during shearing.

No. 35. Cross-bred washed (hogget); good quality, length, free. Spinning quality, 54s.; value, 16d. per lb.

No. 36. Cross-bred washed; much lower in quality: with open, fuzzy staple and wasty. Spinning quality, 50s.; value, 12d. per lb.

No. 37. Scoured merino fleece; bold, free wool; well got up. Value, 18d. per lb.

No. 38. First pieces scoured; bulky, lofty, bright wool; nicely scoured. Value, 16d. per lb.

No. 39. Second pieces; small, bitty, little sort. Value, 12d. per lb.

No. 40. Third pieces; better colour than No. 39, but very seedy. Value, 10d. per lb.

No. 41. Lamb's wool, scoured; bulky; good bright colour; well scoured. Value, 13d. per lb.

No. 42. Cross-bred pieces; scoured, bold, lofty wool. Value, 11½d. per lb.

No. 43. Fellmongered, first, scoured; very bitty, stringy; of mixed qualities. Value, 11d. per lb.

No. 44. Fellmongered, seconds, scoured; very slight difference from No. 43. Value, 10½d. per lb.

No. 45. Fellmongered, thirds, scoured; small brown sort. Value, 8½d. per lb.

Nos. 46 and 47. Merino top, or combed wool, previous to commencing to spin. The combing machine takes out all imperfect fibres, moits, &c., and leaves nothing but sound, clean wool, termed as above. A process is required before making worsted goods. No. 1, value, 2s. 2d.; spinning quality, 60s. No. 2, value, 1s. 10d.; spinning quality, 56s.

No. 48. Nails, *i.e.*, faulty wools, combed out of long wools by the combing machine. These are poor samples, since the wool has been a bad colour, and very seedy. Value, 10d.

No. 49. Top spun, soft into yarn for fingering work.

No. 50. Carded wool, *i.e.*, wool prepared or straightened out previous to combing, and containing all faulty fibres, &c. At this stage it may be made into cloth, hosiery or worsted goods.

B.—Foreign.

2,882.

Wools used in low blankets and carpets. Regular monthly sales held in Liverpool:—

No. 51.	East Indian wools;	Joria white.	Value, 11½d. per lb.
No. 52.	Do do	Joria yellow.	Value, 9½d. per lb.
No. 53.	Do do	Joria grey.	Value, 8½d. per lb.
No. 54.	Do do	Native brown grey.	Value, 5d. per lb.
No. 55.	Do do	Vicuna white.	Value, 11d. per lb.

No. 56.	East Indian wools ;	Vicuna yellow.	Value, 9½d. per lb.
No. 57.	Do	do	Vicuna 2nd yellow. Value, 7½d. per lb.
No. 58.	Do	do	Kandahar white. Value, 11d. per lb.
No. 59.	Do	do	Kandahar yellow. Value, 8½d. per lb.
No. 60.	Do	do	Kandahar grey brown. Value, 6d. per lb.
No. 61.	Do	do	Pachatan white. Value, 9½d. per lb.
No. 62.	Do	do	Pachatan yellow. Value 7¾d. per lb.
No. 63.	Do	do	Pachatan grey. Value, 5d. per lb.
No. 64.	Do	do	Marwar white. Value, 9½d. per lb.
No. 65.	Do	do	Marwar 2nd white. Value, 8d. per lb.
No. 66.	Do	do	Marwar yellow. Value, 6d. per lb.
No. 67.	Do	do	Native black. Value, 4d. per lb.
No. 68.	Ionic	do	Fawn and black. Value, 6d. per lb.

2,899.

N.B.—Nos. 69–79 are Carpet Wools.

No. 69.	Egyptian wool ;	extra white.	Value, 1s. 1d. per lb.
No. 70.	Do	1st white.	Value, 9½ per lb.
No. 71.	Do	yellow.	Value, 11½d.
No. 72.	Egyptian 1st yellow	carding.	Value, 8½d. per lb.
No. 73.	Egyptian fawn and black	combing.	Value, 8d. per lb.

2,904.

No. 74.	Angora washed ;	inferior specimen.	Value, 9½d. per lb.
No. 75.	Damascus washed	fleece combing.	Value, 8½d. per lb.
No. 76.	Damascus greasy	combing.	Value, 5½d. per lb.

2,907.

No. 77.	Kassapbatchi 1st white	combing.	Value, 8½d. per lb.
No. 78.	Kassapbatchi 2nd white	combing.	Value, 7½d. per lb.
No. 79.	Kassapbatchi grey	combing.	Value, 5½d. per lb.
No. 80.	Monte Video, washed ;	is of the merino class, though, from neglect, has lost its character, and becomes an inferior, faulty wool ; is a very irregular sort, and fully represents the style in which wool from this country is put before buyers.	Value, 7d. per lb.

2,910.

No. 81. Monte Video ; greasy merino ; a small, little wool, of very good lustre ; used in clothing goods ; it requires a little assistance from other wools in blending, as it felts poorly. Value, 8½d. per lb.

No. 82. Monte Video ; greasy merino ; the staple is open and loose ; very wasty, with hard feel. Value, 9½d. per lb.

2,913.

No. 82. Buenos Ayres greasy merino combing ; of medium length, thin wiry staple, with long wasty tip, and will give much noil. This wool competes with Australian faulty wool, and is grown in large quantities ; it will always be the means of keeping down the price of that class of wool. Value, 6½d. per lb.

2,914.

No. 83. Peruvian washed merino ; is a much neglected wool, all traces of merino having disappeared ; is a thin, open, fuzzy wool, run through with grey or black hairs and kemps. This wool has been tried

in the combing machine, and on account of its wasty nature (giving a great quantity of noil), the results were not satisfactory; is used mostly for low clothing goods. Value, 1s. per lb.

No. 84. Peruvian fleece; much lower in quality, and altogether inferior to No. 83. Value, $8\frac{1}{2}$ d.

2,916.

No. 85. Lima greasy; a combing wool of very low quality, with rough, loose hair; wasty. Value, $8\frac{3}{4}$ d. per lb.

No. 86. Lima brown; as No. 85. Value, $7\frac{1}{2}$ d. per lb.

2,981.

No. 87. Morocco washed fleece; very light, straight-fibred wool; slightly kempy; value, $10\frac{1}{2}$ per lb.

No. 88. Morocco greasy fleece; resembling a very bad type of cross-bred; a straight, coarse, unkind fibre. Value, $6\frac{1}{2}$ d. per lb.

2,820.

No. 89. Spanish (black wool); a combing wool; evidently one of the coarser styles of wool grown in Spain; supposed to be originally a cross between the Cotswold and merino. Value, 6d. per lb.

2,921.

No. 89. Oporto fleece; a white, rough wool; probably same breed as 89. Value, $10\frac{1}{2}$ d. per lb.

No. 90. Castelfranco, Venice (fleece); a light, spongy, open wool; brighter and finer than 89; evidently same breed. Value, 1s. $1\frac{1}{2}$ d. per lb.

2,922.

No. 91. Castelfranco yellow; this specimen is mohair, of inferior sort; has a bright lustre; very light and fuzzy. Value, $10\frac{1}{2}$ d. per lb.

2,924.

No. 92. Mohair (Angora goat); is a very good specimen; of long, silvery, lustrous fibre; clean, silky, and will give very little noil. Will spin to 56s.; value, 16d. per lb.

No. 93. Mohair (Van); this is what may be termed fallen hair—that is, taken off after death—and contains a great many sorts, requiring careful sorting before use. It is very injurious to the sorter, and is the cause of that illness known as “wool-sorters’ disease.” It was considered so dangerous that the British Parliament made a special law to enforce certain regulations, such as fanning, washing, &c., before it was given to the sorter. When the hair is opened out for sorting, the air becomes filled with minute fibres, which can only be seen by means of a magnifying glass or in the rays of the sun; also, a very fine dust, with a sickly smell, evidently poisonous. This is inhaled by the workman, and I have known men, strong and hearty to all appearances, go home after work, and die in a few hours. Grown in Asiatic Turkey. Value, 1s. 2d. per lb.

2,926.

No. 94. Vicuña (Peru.); this wool or hair resembles a very fine Alpaca, and is sold as such; is of great length; of silky, soft fibre, and made into high classic dress goods, which often take the lead in fashion; grown in different natural colours. Has been sold in bulk as high as 3s. 9d. per lb.

2,927.

No. 95. Alpaca (Arequipa, Peru); much lower in quality; in black, white, grey, and brown. Value, 1s. 4½d. per lb.

No. 96. Alpaca (Callao, Peru); still lower sort; in different colours. Value, 11d. per lb.

C.—Domestic (British).

No. 97 to 117. English wools, which are particularized in the main collection of British wools.

GENERAL COLLECTION OF DOMESTIC WOOLS.

ON account of the many varied breeds of English sheep, which give so many different types of wool, the collection is arranged, to simplify matters, by displaying, in rotation, lustres, demi-lustres, and intermediate breeds, concluding with the Downs families.

*Lustre Wools.***1,410, 2,930.**

No. 1. Sample of Lincoln wether wool (all wools, with the exception of Downs, are called wether wools after the first fleece is taken off, the wool-stapler or manufacturer taking no notice of the sex, male or female; but using the terms, "hogget" and "wether"); stands first in the extensive family of pure lustres; the wool is of great length, very bright and silky, but coarse, and of great weight of fleece—average about 9 lb. I knew a sample sheet of Lincoln's, averaging 28½ lb. per fleece, to sell at 2s. 4d. per lb., in 1864. There were only two breeds of long-woolled sheep formerly—Lincoln and Romney Marsh; now there are many. The wools are used mostly in the worsted trade at Bradford, and from this wool came the distinguishing point of worsted and woollen goods. Value, 10½d. per lb.; spinning quality, 34s.

1,410.

No. 2. Hogget's wool (Lincoln), or first fleece from a sheep; this specimen is of great length; of deep, heavy, silky, lustrous wool; good quality. Spinning quality, 36s.; value, 11½d.

1,422.

No. 3. Yorkshire wether's wool, grown mostly in the East Riding; is included in lustre wools; they are probably descendants of the Lincoln; used in the Bradford stuff trade (worsted pieces); not so long as the Lincoln, but possess the same metallic lustre. Spinning quality, 34s.; value, 10½d. per lb.

1,422.

No. 4. Yorkshire hogget's wool; very good specimen, giving the deep-grown strong type all through. Spinning quality, 36s.; value, 11d. per lb.

1,413.

No. 5. Nottingham wether's wool, which retains all the qualifications of the lustrous varieties; is equally long, lustrous, sound, and strong as the Lincoln. Spinning quality, 34s.; value, 10½d.

1,413.

No. 6. Nottingham hogget's wool; a little heavier in condition; has a bold, free, and pure, bright staple. Spinning quality, 36s.; value, 11d. per lb.

2,932.

No. 7. Leicester wether's wool; is not so long as the previous wools, but equal in lustre; is included in the bright-haired wools; this specimen is a low one; does not give a fair idea of a pure Leicester. (The specimen in Messrs. Chard & Co.'s collection, p. 81, is much better). The wool ought to be much finer than the Lincoln, with a wavy staple. The better part of fleece spin to 40s. Spinning quality, 32s.; value, 10d.

1,415.

No. 8. From the same flock as No. 7; my opinion is that neither is Leicester, although so named, but Yorkshire. Spinning quality, 34s.; value, 10½d.

*First Demi-lustre Wools.***1,420.**

No. 9. Stafford wether; a bright wool; not so long as lustre; a deep-grown wool; much finer in quality; may be called a shorter, finer Leicester wool, and every appearance of being from that family. Spinning quality, 36s.; value, 10½d.

No. 10. Stafford hogget; a combing wool of much longer and bolder growth than No. 9, with very compact, bright, wavy staple, and of good quality. Spinning quality, 40s.; value, 10½d.

1,424.

No. 11. Irish wether. There are two kinds of Irish sheep—one running on the hills in Wicklow and Kerry, whose wool is very coarse and mixed with strong hair; whilst the other breed, running on the

plains, gives a longer and finer wool. Is used to blend with Kent wool. These samples are very long and well-grown, with white, free staple, which has a nice, natural wave. They are fair specimens. Spinning quality, 36s.; value, 10½d.

No. 12. Irish hogget; a really good sample; is very white, with long, free, wavy staple; very little waste. Spinning quality, 40s.; value, 11¼d. per lb.

Second Demi-lustre Wools.

1,417.

No. 13. Gloucester wether. This sample is too deep and long grown for Gloucester wool, and appears to be from a long-woolled sheep. The original breed was the Ryeland sheep, which produced a wool of great fineness for carding purposes only. The present breed is a cross between the above named and Leicester, which produces a very useful, desirable wool of nice length, with fineness. The present sample is very coarse, long, and strong. Spinning quality, 30s.; value, 9d.

No. 14. Gloucester hogget; same style of wool as No. 13. Spinning quality, 34s.; value, 10d.

1,416.

No. 15. Bedford wether, which is a cross between the Ryeland breed and Leicester; staple of medium length, and wavy, soft, silky, and free. Spinning quality, 36s.; value, 10½d. per lb.

1,441.

No. 16. Hereford wether; a fair type of second demi-lustre, of medium length; wavy staple; strong, hard fibre. Spinning quality, 34s.; value, 10d.

No. 17. Hereford hogget; a beautiful specimen of combing, silky, wavy, free, bright wool, of good quality. Spinning quality, 40s.; value, 11¼d.

1,425.

No. 18. Salop wether (Shropshire). This wool is the result of a cross between Shropshire and Cotswold, which produces long, soft, silky staple, with brightness. Spinning quality, 36s.; value, 10½d. per lb.

No. 19. Pick Salop hogget; shows distinctly the beautiful Cotswold type of bright, soft, silky wool, with a free, well-serrated staple of great elasticity. Spinning quality, 42s.; value, 13d.

1,437.

No. 20. Norfolk Down teg or hogget. This breed formerly was short and fine woolled, but on account of much crossing has nearly died out. The sample is very lustrous, and too bright for a Down wool. Is medium in length, and will give much noil. Spinning quality, 36s.; value, 10½d.

1,438.

No. 21. Norfolk half-bred wether, showing very rough, hard hair, with staple of nice, even length. Value, 10½d.; spinning quality, 3½s.

*Scotch and Border Wools.***1,428.**

No. 22. Cheviot wether combing wool; of nice length, with wavy soft staple; is one of the improved breed; the original wool was of fine quality usually, extensively used in the manufacture of tweed and Cheviot cloths; the improved breed, as per specimen, is a cross with the Leicester, now called Leicester-Cheviot; the wool, classed in demi-lustre, is now used in the Bradford worsted trade. Spinning quality, 36s.; value, 9d. per lb.

No. 23. Cheviot hogget; a long, thin, wavy staple of bright kind, soft, silky wool, showing distinctly the Leicester cross. Spinning quality, 38s.; value, 9½d. per lb.

1,443.

No. 24. Northumberland hogget's wool; may be classed with the Cheviot improved breed, showing a lustrous long staple of free soft wool; a great improvement upon the wether wool; used in the worsted trade. Spinning quality, 38s.; value, 10d. per lb.

No. 25. Northumberland wether's wool, which is one of the original type; short fine wool, resembling the Down family; used in the cloth trade. Value, 9d. per lb.

1,429.

No. 26. Scotch Highland; is composed of wool and hair; the wool does not increase year by year, but falls off on the approach of summer, leaving hair alone as a covering during the hot season; the sheep are not always shorn, but very often plucked; the wool is very long, with coarse wiry top; the lower part of the staple is fine and soft, with kemps running through; is made into Genappe yarn (a coarse worsted yarn, smoothed by heat). Value, 6½d. per lb.

1,430.

No. 27. Laid Scotch or Highland wool, resembling No 26; much shorter growth, with great quantity of thick fatty matter; used as last sample in lower sort. Value, 4½d. to 5d. per lb.

1,431.

No. 28. Craven wools; grown in the mountain district in the West Riding of Yorkshire; is a cross between the Scotch (evidently Highland) and Leicester; the top of staple is heavy and coarse, whilst the rest shows a bright lustrous wool; used in low worsted goods. Value, 6½d. to 7d. per lb.

1,436.

No. 29. Welsh wool, of which there are two classes—one, the mountain sheep, giving a fleece of a mixture of wool and hair, represented by this specimen; is a combing wool of medium length; used in low worsted trade. Value, 8d. per lb.

The representative breed of real Welsh, furnishes a soft fine short wool, from which is made the celebrated Welsh flannel.

Down Wools.

1,440.

No. 30. Hampshire Down ewe's wool; is much longer and coarser than most of the Down; has a hard unkind feel, although the fibre is classed as fine; is used in making flannel and light woollen fabrics. Value 9½d. per lb.

No. 31. Hampshire Down teg (hogget); of great length and quality, representing one of the finest English combing wools; has a rather hard feel, with slight serration. Spinning quality, 54s.; value, 11d. per lb.

1,432.

No. 32. Oxford Down ewe; much lower in quality, with rough open hard wool; used in the clothing trade. Value, 8d. per lb.

No. 33. Oxford Down teg; not so long as No. 31; little lower in quality; used in combing trade. Spinning quality, 30s.; value, 10d. per lb.

1,435.

No. 34. Sussex Down ewe; a specimen of the improved breed, and resembling the Hampshire greatly, being a little finer; used for same purposes. Value, 8½d. per lb.

No. 35. Sussex Down teg; showing great improvement in length and quality; with wavy, bright staple, of nice combing length. Spinning quality, 52s.; value, 11d. per lb.

1,444.

No. 36. Dorset Down teg; is said to be the only sheep of the Down family that has been kept pure; this is on account of its great prolificness, rearing a larger number of lambs than any other sheep, and at an earlier period. The wool is fairly long; not so pure as the Southdown, but much brighter, and almost free from grey, which is so conspicuous in the Down wools. Spining quality, 44s.; value, 10d. per lb.

Skin-wool and hair from Messrs. Alfred Ramsden & Co., Dewsbury, Yorkshire.

14,723.

No. 1. Cross-bred skin-wool (washed); a very small, little, bitty wool; clear, bright, and finely serrated; is a good felting wool; used in low cloths, rugs, and carpets. Value, 8d. per lb.

14,724.

No. 2. Skin-wool of Lincoln sheep; of various qualities, containing lustre and softness; used in rug and carpet trade. Value, 7d. per lb.

14,725.

No. 3. Yorkshire skin-wool ; is a bold, bright sort, which will comb ; may be used in low worsted goods. Value, $6\frac{1}{2}$ d. per lb.

14,726.

No. 4. Lincoln skin-wool ; of low quality, showing kemps. Value, $6\frac{1}{2}$ d. per lb.

14,727.

No. 5. Lincoln skin-wool ; of low quality, showing kemps. Value, $6\frac{1}{2}$ d. per lb.

14,728.

No. 6. Shankings, from deep-grown sheep. Value, $5\frac{1}{2}$ d. per lb.

14,732.

No. 7. White kid-hair. (The hairs of goats, cows, &c., are used in making a low cloth or stiff material called "Camlets"). Value, $4\frac{1}{2}$ d. per lb.

14,736.

No. 8. White goat-hair. Value, 4d. per lb.

14,738.

No. 9. Brown cow-hair. Value, $1\frac{1}{2}$ d. per lb.

14,739.

No. 10. White cow-hair. Value, $3\frac{1}{2}$ d. per lb.

14,737.

No. 11. Brown calf-hair. Value, $1\frac{1}{2}$ d. per lb.

14,733.

No. 12. Grey kid-hair. Value, 2d. per lb.

14,734.

No. 13. Grey goat-hair. Value, $1\frac{1}{2}$ d. per lb.

14,735.

No. 14. Black goat-hair. Value, $1\frac{1}{2}$ d. per lb.

16,919.

No. 15. Worsted fly or shoddy, which is used by mixing with wool in making low cloths, with the idea of producing a cheap material.

16,920.

No. 16. Material from which worsted shoddy is made ; is part of an old worsted sock.

MANUFACTURE.

1. Worsted or Combing Wools.

FOR such readers of this catalogue who are interested in wool, and who have not had an opportunity of learning the technicalities thereof, the following notes in regard to the spinning qualities of commercial wool, as required by the manufacturer, are given:—

In speaking of counts or qualities to which merino wools can be spun, a great deal depends upon selecting a proper sort of wool from which to spin various kinds of yarns required for various textile goods, because upon this suitability of the raw material will depend the success of the manufactured article. In the whole range of technical knowledge, perhaps nothing requires greater judgment and experience than the selection and blending of various wools; and if there be any neglect in this preliminary it is impossible to spin a regular yarn.

Counts are described as “numbers given to any yarn, according to the number of hanks in a pound weight.” There are 560 yards of worsted yarn to a hank. What are called 30 s., 40 s., are those of thirty or forty hanks of that measure. A pound of wool has been spun into yarn 92 miles long. The spinning capacity of wool depends entirely upon the length and diameter of the fibre; because if we get less than a certain number of fibres in a cross section of the thread, there cannot be uniformity in spinning or tenacity in the yarn. The fineness of wool differs very much in different classes of wool, even in a single fleece; and any imperfection in sorting produces imperfect threads,—the great object being to have regularity of length, fineness, elasticity, and soundness of staple, according to its particular sort. Coarse, fine, strong, and tender staples being present in the wool in its natural condition, it is unfit for textile purposes until sorted; and any attempt to utilize it in the fleece state would result in spinning of uneven, faulty, and unsatisfactory yarns. About thirteen or fourteen sorts can be obtained from one fleece, but frequently not more than five to seven are made. In a lecture by Dr. Bowman he concluded by saying:—“Careless sorting and preparation will render the best spinning in the world of no avail. I am afraid that present tendency in worsted spinning is in the direction of less careful sorting in the wool; and I would like to express a very strong opinion that this is a step in the wrong direction, as it may easily neutralize many of the improvements which have been introduced into machinery, and without this as a preliminary it is impossible to secure good and uniform yarn even with the best plant in existence.”

By the wool growers in Australia, who scour the whole of their clip, this question deserves the greatest consideration, and the substitution of sorting for classing will result in marked pecuniary advantage to them. The manufacturers themselves know best what they require, and any grower who places his produce unsuitably to their requirements is doing an injustice to himself.

In respect to the various sorts contained in merino wools, the following table of qualities or counts to which they can be spun, taken from Leroux' *Treatise on the Manufacture of Worsted and Carded Yarns*, will give some idea of the relation between fineness and spinning power:—

COMPARISON of wools from different sources, with the diameter and the counts into which they can be

spun :—

Sorting number.	WOOL FROM—						Counts.	Diameter of fibres in decimals of an inch.
	Silesia.	Saxony.	Australia.	Champagne.	Spain.	North of France.	Algeria.	
1 ...	Extra fine. ....	.....	.....	.....	.....	.....	.....	199·35 ...
2 ...	Superfine	Extra fine.....	.....	.....	.....	.....	.....	159·48 ...
3 ...	Fine	Superfine	Extra fine.....	.....	.....	.....	.....	141·76 ...
4 ...	Semi-fine	Fine	Superfine	Extra fine.....	.....	.....	.....	128·47 ...
5 ...	Medium	Semi-fine	Fine	Superfine	Extra fine.....	.....	.....	115·18 ...

From
·0059 to ·0098

From the above it will be seen that only the very finest of Colonial wools were tested, and as in all other types there are a great number of sorts in the merino. The lower sorts, such as deep-grown strong, will spin as low as 46s., varying to 56s.; the next, or average, from 58s. to 80s., which sorts will represent the spinning qualifications of wools grown in different Colonies, each sort being defined as 46s., 48s., 50s., and so on, the alternate number specifying the grade or counts, which can only be made when the fleece, is divided into its distinct parts.

TABLE showing the different qualities to which English wools are spun.

Downs.	Demi-lustres. (Kent and Irish).	Lustres. (Lincoln, York, Leicester).	Counts or quality.
Superfine .....	.....	.....	56 s.
Fine .....	.....	.....	50 s.
Medium .....	.....	.....	46 s.
Coarse.....	Superfine.....	.....	42 s.
Very coarse	Fine	Superfine	40 s.
.....	Medium	Fine ..	36 s.
.....	Coarse	Medium ..	32 s.
.....	Very coarse.. ..	Coarse	28 s.
.....	.....	Very coarse.....	24 s.

¹ When more sorts are made, the qualities will run from 24s., 26s., 28s., and so on, until 56s. is reached. The Australian low wools come in at about 46s. quality, the finer sorts running up to 100s., after which qualities go in leaps and bounds to 141s, there being only two qualities above, taken from extra Silesian wool—159s. and 199s. This will give an idea of the very many varied sorts, from the lowest deep-grown lustres to the extremely fine merino.

Having given a description of wool in its varied classes and sorts, it will be of interest to both the grower and the public to note the many different stages the raw products goes through, also the various kinds of goods made, as the wool passes through the hands of the manufacturer. Such processes are well illustrated by the collections in this Museum.

The first collection is from—

Messrs. John Priestman & Co.,* Worsted Spinners and Manufacturers, Ashfield Mills, Bradford, York, England.

The exhibit is very comprehensive, dealing with wool (Australian merino) from the greasy to the yarn, ready for the loom. A similar exhibit gained the Gold Medal at the Paris Exhibition, 1878—a very high honor.

I.—Wool.

18,071 to 18,095.

(a) Port Phillip greasy wool.

(b) Port Phillip fleece washed wool.

* Obtained through the kind intermediary of Messrs. W. H. Chard & Co., Sydney, and Messrs. Jacomb, Son, & Co., London.

- (e) Scoured Port Phillip wool.
- (d) Greasy, fleece, and scoured Port Phillip wool, mixed ready for carding.
- (e) "Noils," *i.e.*, short wools and knots extracted from the carded wool in combing; makes beautiful flannels, for which there is great demand. Value, 1s. 6d. per lb.
- (f) Carding, *i.e.*, ball of wool carded. At this stage the specimen can be made into worsted, hoisery, or cloth yarns, and contains faulty fibres and moits.
- (g) "Top," *i.e.*, ball of wool combed, with short wool and burr extracted.

II.—Drawing operations.

N.B.—In the first and second operations the sliver, top, or ribbon of wool is run into cans, and, therefore, cannot be represented in the exhibit.*

BOBBINS ON SHELVES.

18,078.

- Nos. 1 and 2 represent the third drawing operation.
- No. 3 represents the fourth drawing operation.
- No. 4 represents the fifth drawing operation.
- Nos. 5 and 6 represent the sixth drawing operation.
- Nos. 7, 8, 9, 10 represent the seventh drawing operation.
- Nos. 11, 12, 13, 14, 15, 16 represent the eighth drawing operation.
- Nos. 17, 18, 19, 20, 21, 22 represent the ninth drawing operation.
- Nos. 23, 24, 25, 26, 27, 28, 29, 30 represent the tenth drawing operation.
- Nos. 31, 32, 33, 34, 35, 36 represent the eleventh drawing operation.

III.—Yarns (*Weft*),† &c.

SINGLE YARNS.

18,087.

- No. 37. 1/48s.,‡ on spools, for worsted coating trade.
- No. 38. 1/60s., on spools, for Bradford stuff trade, ladies dress goods.
- No. 39. 1/90s., on spools, for fine Bradford stuff trade, ladies dress goods.
- No. 40. 1 68s., on tubes, for export trade.
- (b) In hanks, soft spun yarns, for hosiery goods.

DOUBLE YARNS.

18,091.

- Nos. 41 and 42. 2/20s., hanked and scoured, for hoisery goods.
- (c) In centre of stars, arranged in bee-hive form.

* See photograph of sliver can inside Case 68.

† Weft yarns are not spun so hard or strong as warp yarns. The weft is woven or interlaced into the warp.

‡ Number represents counts or quality of spun yarns.

18,094.

Nos. 43 and 44. 2/36s., hand twisted and warped ; yarn made specially for the warp of piece, which is mounted in the loom ; the various threads run parallel to each other at equal distances apart at the beginning and end of piece.

(d) Alternate small bobbins of stars.

Nos. 45 and 26. 1/20s., on spools, for heavy coating trade.

(e) Alternate large bobbins of stars.

Nos. 47 and 48. 2/36s., on double-headed bobbins, for winding.

(f) In columns in each angle, at back of case.

Nos. 49 and 50. 2/36s., hard twisted on bobbins for warping.

No. 51. Cashmere dress goods (purchased). Cream colour piece, dyed. These fabrics represent the highest class, and are made from the finest merino combing wool, which must be of the purest white to take so delicate a shade. Formerly they were made entirely of Cashmere goat's hair (Thibet), from which they derived the name. The Colonial wools have supplanted that article, and make a material equal in every respect, owing to the fineness of fibre, length, pliability and softness.

No. 52. Cardinal merino dress goods (purchased), dyed, in piece. This make takes second place to the Cashmere in high class ladies' dress fabrics, and is composed of nothing but pure wool, warp, and weft, which, when woven, form a small fine twill.

A collection of Australian cross-bred wools in different forms of manufacture. It is very complete, and shows in great contrasts in quality from different exhibits ; presented by Messrs. John Dale & Co., Worsted Spinners, Bradford, Yorkshire, England.

18,091a.

Nos. 1 to 7. Samples of greasy Australian cross-bred, showing different qualities from 40s. to 50s.

18,098.

No. 8. Cross-bred scoured, after which it is put through a machine called "Fearnought," to straighten the fibres previous to carding.

18,099.

No. 9. Carded wool or sliver which, comes out in a long ribbon-like form ; the wool being greasy and dirty is put through a back-washing machine, where it is immersed in scour and goes through rollers, over drying cylinders, passes on through a Gilling machine to straighten the fibres, draw out the carding level, and prepares it for the combing machine.

18,100.

No. 10. Combed wool, top, or sliver, having all fibres adjusted in parallel form ; all short, curly hairs removed, which are called noils.

18,101.

No. 11. Noils, or loose short curly faulty fibres, along with moits, combed out of sound wool; used in making flannels.

18,102.

No. 12. Double-headed bobbin of drawing, which is the first stage of spinning; this is done by taking a number of ribbons or "top" of combed wool, extending them to such a length as to produce a thick soft thread; when twisted, they will form a yarn capable of bearing tension; after this process, it passes on to another stage called roving.

18,103.

No. 13. Roving, which is another combination of drawing and twisting, only in a smaller form.

18,104.

No. 14. Twofold yarn, or double, ready for use.

18,105.

No. 15. Single yarn, ready for the shuttle for weaving.

18,106.

No. 16. Four spools of yarn for warps.

18,107 & 18,108.

No. 17 and 18. Finer yarn for weft, ready for the loom.

18,109.

No. 19. Yarn, on paper tube, as prepared for export.

It will be of great interest to many, after inspecting the English or domestic long-wool specimens, to know what kind of goods they are made into; and, to serve this purpose, and also for instruction in technical details, there is a collection of about 300 patterns of worsted piece fabrics in every conceivable design, and of the most correct dyes and delicate shades. These goods are made principally in Bradford and district, Yorkshire, England, and are called "Bradford stuffs," on account of the manufacturers inventing these styles of goods as a distinction from the woollen trade.

These stuff pieces in a great many cases are not made entirely of wool, but are composed of cotton warps and worsted wefts.

At one time these "stuffs" were the staple trade of that town; but, on account of the great improvement in machinery, and Australasia producing a much longer class of merino wools, are now made into the famous soft fabrics or goods, in which is used the finest Colonial combing wool, producing the celebrated cashmeres, merinos, and other high-class ladies' dress wear, which constitutes a most important branch of the worsted trade. To such an extent is colonial combing used in that town, that one firm alone (Messrs. Isaac Holden & Co., Com-

mission Wool Combers) is said to comb three-fifths of the wool grown in the Colonies. Knowing the firm and works personally, I think that statement is a little exaggerated, and probably includes their French factories; but in any case this shows the large scale in which wool-combing is carried on.

Worsted Stuffs.

NOTE.—Nos. 1-59 are in Pattern-book No. 1.

No. 1. 54 sett, in the gray or unfinished state, or 60 threads per inch; 1/28s. printed cotton warp; plain finish; not shrunk; 15 picks, 30s. single combed worsted weft; made from Lincoln and Yorkshire wools.

No. 2. Lustre cloth; these cloths vary in sett from 56 to 64, or from 62 to 70, threads per inch in the warp. The warp is cotton, usually single twist; about 50s. or 55s; sometimes 100s. to 120s. double twist is used; the weft is 32s. or 34s., or in some cases 36s. single, spun in fly frames, and composed principally of English wool, hogget lustre, and in limited degree fine mohair. The goods are crabbed—that is, shrunk about 10 to 12½ per cent. in the finish, and singed and pressed between hot plates.

No. 3. Blue shalloon (a light worsted stuff), 68 sett 2/60s. cotton warps; 17 picks, 32s. worsted weft; yarn dyed, half lustre finish; singed; 2 and 2 twill.

No. 4. Maroon shalloon (2), 70 sett, 2/60s. cotton warp; 18 picks, 30s. weft, yarn dyed, glaze finish.

No. 5. Shalloon large twill check, 60 sett, 2/60s. cotton warp; 17 picks, 32s. worsted weft; box weaving.

No. 6. Shalloon small plaid twill, 56 sett 1/36s. cotton warp; 15 picks, 32s. worsted weft; soft finish; box weaving.

No. 7. Shalloon twill small check, 60 sett, 2/40s. cotton warp; 16 picks, 30s. worsted weft; dry finish; singed.

No. 8. Shalloon plain green, 54 sett 2/140s. warp, cotton (South Sea Island); 16 picks, 36s. lustre weft; hogget yarn dyed; weft finish; plain healds.

No. 9. Shalloon check, 70s. or 68s. sett; 2 70s. cotton warp, 15 picks worsted weft, 32s.; colours in quarter inch; demi lustre finish.

No. 10. Six shalloon check, armure pattern; 68 sett 2/60s. cotton warp; 15 picks, 30s. worsted weft; half poplin finish; worked in heald engine.

No. 11. Shalloon twill, 56 sett, 1/36s. cotton warp; 13 picks, 32s.; coloured worsted weft; English wool; dry finish; half poplin.

No. 12. Black shalloon twill, 44 sett, 2/40s., cotton warp, spun soft, with few turns to the inch; 14 and 15 picks; 26 demi-weft; piece dyed and soft finish.

No. 13. Shalloon check, 52 sett, 2/80s., cotton warp 14 picks, 32s. lustre weft; hard finish; singed and crabbed about 10 per cent.

No. 14. Particulars as No. 1.

No. 15. Particulars as No. 1.

No. 16. Particulars as No. 1.

No. 17. Coburg twill, black; 1/50s. cotton warp; 20 picks, 40s. Botany, *i.e.*, merino weft; small figures, raised by Harness.

No. 18. Coburg twill, blue; 1/55s. cotton warp, 64 sett; 20 picks, 40s. coloured weft, soft wool, Port Philip; piece dyed.

No. 19. Coburg twill, dark brown, 2/10s. warp, 56 sett; 24s. worsted weft, spun from a 32s. quality,

No. 20. Coburg, spot printed on after-woven; bright finish; 52 sett, 2/80s. print warp and cotton; 2/80s. black end, 15 picks; 32s. mixture weft.

No. 21. Coburg plain, light brown; 2/100 cotton warp; 16 picks, 36s. lustre weft; bright finish; yarn dyed.

No. 22. Coburg grey; 50s. sett, 1/36s. cotton warp; 14 picks, 32s. demi-lustre weft; printed in the piece.

No. 23. Plain rep, dark brown; 2/36s. and 2/80s. cotton warp; 14 picks 30s. worsted weft; poplin finish.

No. 24. As 23; colour, dark blue.

No. 25. Shalloon twill, light brown, 64 sett, 2/80s. cotton warp; 16 picks, 32s. worsted weft.

No. 26. Coburg, plain brown, dark; 52 sett 1/40s. cotton warp; 14 picks, 30s. worsted weft.

No. 27. All wool Coburg weave, 1/44s.; spun from 80 quality soft wool warp, 56 sett; 17 picks, 44 to 50 soft yarn.

No. 28. Coburg, 1/55s. cotton warp; 15 picks, 32s. mohair weft; small figure worked on surface, 1/50 sett.

No. 29. Coburg, 1/50 cotton warp and 2 100 printed cotton, drawn end and end, 15 and 16 picks; 52s. melange or mixture weft, 54 sett.

No. 30. Shalloon twill, 1/24 cotton warp; 30 melange weft, 15 picks; small cross over worked on surface by silk motion.

No. 31. Coburg, 2/80s. cotton warp front, two ends in a mail; 16 picks, 32 melange weft, 50 sett.

No. 32. Coburg, 44 sett, 2 70 cotton warp, two in a mail; 32s. melange steel mixture weft, 16 picks.

No. 33. Coburg, 50 sett, 1/40s. cotton warp; 14 picks, 32s. melange weft English wool; bright finish.

No. 34. Coburg, 54 sett, 1 40s. cotton warp; 15 picks, 32 coloured weft; trail figure worked by Harness on surface.

No. 35. Coburg, 2 40s. cotton warp, 52 sett; 15 picks coloured weft twill.

No. 36. Coburg, 76 sett, 2 150 cotton warp; 17 picks, 36s. lustre weft made from English wool.

No. 37. Coburg, 1/45s. cotton warp; 16 picks, 32s. mixture weft or melange; bright finish.

No. 38. Mohair lustre, twilled; figure woven in Jacquard or heald motion.

No. 39. Particulars as No. 2.

No. 40. As No. 39.

No. 41. Coburg twill (maroon), 58 sett, single 50s. cotton warp; 19 picks, 40s. soft yarn Australian wool; piece dyed; dull finish.

No. 42. Finished lustre, 66 sett, 1/36s. cotton warp; 18 picks, 26s. weft soft spun, drawn from 36 quality of worsted yarn, dyed; rather soft.

No. 43. 28 sett, two ends in a mail, 2 40s. cotton warp; 20 picks, 40s. weft Australian wool; piece dyed.

No. 44. Stripe crammed, four in a reed; 56 sett, 2 120s. warp cotton; 16 picks 32s. lustre weft; ground dressed, end and end.

No. 45. Finished bright, 2/80 print warp and 1/36s. cotton warp, mixed, 50 sett; 15½ picks, 32s. mixture weft.

No. 46. Serge twill, 56 sett, 2 60s. cotton warp, 15 picks, 32s. weft (worsted), bright finish, singed close, woven in heald engine or eight threads tappet motion.

No. 47. Coburg, 58 sett, $1\frac{1}{3}$ 6s. cotton warp, $1\frac{1}{4}$ 0s. warp, 30s. weft; 3 and 1 twill in four shafts, with tappets; glacé finish wet; crabbed 4 in. out of 27 in.; yarn dyed.

No. 48. These cloths are made from 58 to 64 sett, 2/60s. soft cotton warp; 18 and 22 picks, 44 or 50 soft yarn spun out of 50s. quality, and made from Cape and Australian wools; woven twill serge with tappets, and piece dyed, with dull finish.

No. 49. Shalloon twill, 54 sett, 2 60s. soft spun cotton warp; 17 picks, 30s. to 34s. spun down; Leicester wool weft, mixed with Southdown to a small extent.

No. 50. Shalloon twill, 54 sett, 2/60s. soft spun cotton warp; 17 picks, 30s. to 34s. spun down; Leicester wool weft, mixed with Southdown to a small extent.

No. 51. Shalloon twill, 54 sett, 2/60s. soft spun cotton warp; 17 picks, 30s. to 34s. spun down; Leicester wool weft, mixed with Southdown to a small extent.

No. 52. Shalloon twill, 2/90s. cotton warp; 17 picks, 34s. worsted weft.

No. 53. Estamene twill, 48 sett, 2/60s. soft spun English wool warp; 18 picks, 28s. soft wool weft; Australian wool may be used preferably for weft, but should be of coarse descriptions; finish of goods shrunk and rough on face.

No. 54. 52 sett, $1\frac{1}{4}$ 0s. cotton warp; 16 picks, 32s. lustre weft; ground drawn, end and end; first stripe crammed.

No. 55. 54 sett, $1\frac{1}{3}$ 6s. cotton weft; 16 picks, 32s. lustre weft; composed of mohair and English wool.

No. 56. 54 sett, $1\frac{1}{3}$ 6s. cotton weft; 16 picks, 32s. lustre weft; composed of mohair and English wool.

No. 57. 56 sett, $1\frac{1}{5}$ 0s. cotton warp; 15 and 16 picks, 32s. mixture worsted weft.

No. 58. 56 sett, $1\frac{1}{5}$ 0s. cotton warp; 15 and 16 picks, 32s. mixture worsted weft, drawn end to end.

No. 59. 56 sett, $1\frac{1}{5}$ 0s. cotton warp; 15 and 16 picks, 32s. mixture worsted weft; mixed in arrangement of ends, with 2/80s. print added.

NOTE.—Nos. 60–130 are in Pattern-book No. 2.

No. 60. These goods are made from 32 to 48 sett; double ends, usually of double warp cotton, ranging from 2/60s. to 2/80s. counts; about 18 picks, 32s., 36s., or 40s. weft, worsted; are mostly piece dyed.

No. 61. 2/60s. cotton warp; about 60 sett; cord ends in a mail; 19 picks, 40s. soft yarn.

No. 62. Mixture or melange twill shalloon; $1\frac{1}{4}$ 0s. cotton warp; 32s. weft, mixture worsted.

No. 63. 2 40s. cotton warp; 56 sett; small figure cloth, with twill; 16 picks, 32s. worsted weft.

No. 64. Grenadine cloth, woven as a gauze; all cotton; about 38 sett.

No. 65. Small armure pattern, with single end stripes; cotton weft, 2/80–60s. sett; 14 and 15 picks, 24s. weft.

No. 66. Figured Bakarno, diagonal pattern; 58 sett, $1\frac{1}{4}$ 0s. cotton weft; 18 picks, 30s. from 32s. quality of worsted weft.

No. 67. 54 sett, 2/50s. cotton warp ; 17 picks, 32s. worsted weft ; figure woven in Jacquard.

No. 68. All-wool warp. 2/60s. to 70s. ; Cape wool ; about 48 sett ; 16 picks, 30s. weft ; made from fine lustre wool, with a sliver of silk or alpaca run through in preparing.

No. 69. Figured cloth, woven in Jacquard loom ; 80 sett, 2/60s. cotton warp ; 32s. alpaca weft, 18 picks.

No. 70. 2/100s. cotton warp, 60 sett ; 17 picks, 32s. worsted weft ; hogget lustre ; woven in Jacquard, with pine pattern figures.

No. 71. Grenadine ; plain gauze weaving ; cotton warp, 2, 50s. ; 36s. worsted weft.

No. 72. 64 sett, 2/60s. spun silk warp, dyed in colours ; 18 picks, 32s. worsted weft ; figure woven in Jacquard.

No. 73. 2 60s. cotton warp, 54 sett ; 16 picks, 30 32s. worsted weft ; twill check ; plain smooth finish.

No. 73A. 56 sett, 1/45s. cotton warp : a 2'140s. cotton warp ; 16 picks, 32s. out of 36s. quality ; mixture worsted weft ; six and eight ends ; 2 60s. silk in stripe check ; plain treading.

No. 74. 2 40-48 sett to 52 sett cotton warp ; 16 picks, 32s. worsted weft ; croquet pattern.

No. 74A. 2 36s. cotton warp, 52 sett ; plain finish ; shalloon twill check.

No. 75. Check mixture, 1 15 cotton warp, 56 sett ; 15 picks, 32s. mixture weft.

No. 75A. 2/36s. cotton warp, 50 sett ; 15 picks, 28s. weft ; small figure woven in heald engine loom ; ordinary finish.

No. 76. 2/40s. cotton warp, 52 sett, shalloon twill ; 16 picks, 32s. worsted weft.

No. 76A. 1 40s. cotton warp, 54 sett ; 28s. worsted weft, 17 and 18 picks ; balerno finish.

No. 77. 52 sett, 1 50s. cotton warp ; 14 picks, 32s. mixture weft.

No. 78. 1, 40 warp ; 44 sett, 24s. and 36s. mohair and hogget lustre, raised.

No. 79. 56 sett, 1/45s. warp, cotton ; 16 picks, 32s. worsted weft ; two ends print for stripe ; figure worked on face.

No. 80. Grenadine ; cotton warp and cotton weft ; a dozen reeds of the stay crammed and equal number missed ; pattern raised to steving.

No. 81. Grenadine ; cotton warp and cotton weft ; a dozen reeds of the stay crammed and an equal number missed ; pattern raised to steving.

No. 82. Grenadine ; cotton warp and cotton weft ; a dozen reeds of the stay crammed and equal number missed ; pattern raised to steving.

No. 83. Botany (merino) cord, sateen stripe, and cord ground ; cotton warp, with 44 to 50s. merino weft.

No. 84. Grenadine ; woven gauze healds.

No. 85. Grenadine ; woven gauze healds.

No. 86. Fine gauze, woven from gum silk warp, and 24s. worsted weft ; challe finish.

No. 87. Fine gauze ; rather finer in sett, but same in warp and weft.

No. 88. 2 90s. cotton warp, and 28 0s. silk warp, put two ends in a mail ; 17 picks, mixture weft, 36s. ; broken twill, or cross twill, as it is more frequently termed.

No. 89. All-wool fancy cr pe cloth ; woven in plain heald for ground and gauze for stripe, within two reeds missed in the stey at every stripe opening.

No. 90. 2/36s. cotton warp ; 17 picks, 32s. coloured worsted weft ; shalloon twill, fancy check, smooth finish.

No. 91. 2 36s. cotton warp, 50s. sett ; 15 picks, 28s. worsted weft ; shalloon twill ; picked 4 and 4 warp, dressed fancy ; smooth finish.

No. 92. 2/60s. cotton warp, 56 sett ; 15 and 16 picks, coloured weft, 30/32s. worsted ; plain finish ; cross twill.

No. 93. 2/40s. cotton warp, 54 sett ; 16 picks, 32s. weft, worsted ; shalloon twill, fancy check ; ordinary finish.

No. 94. 2/36s. cotton warp, 56 sett ; 16 picks, 32s. worsted weft ; shalloon twill, fancy check ; smooth finish.

No. 95. 2/36s. cotton warp, 76 sett ; 18 picks, 32s. worsted weft ; bright lustre wool ; sateen cloth, woven eight threads sateen, with fringe in Jacquard.

No. 96. 1/50s. cotton warp with end, with a print here and there ; 16 picks, 30s. worsted weft ; cross dyed ; woven in Jacquard.

No. 97. 2/40s. cotton warp, 80 sett ; 17 picks, 30s. worsted weft ; hogget lustre wool ; sateen ground and figure, woven in Jacquard.

No. 98. 2/40s. cotton warp, 36 sett ; 8s. woollen weft ; made from a low quality of woollen twill, raised in finish.

No. 99. Heather mixture ; end and end cloth, woollen and cotton ; twisted woollen thread for warp, plain weft for crossing ; bright finish.

No. 100. All-wool tweed effect in twill cloth ; mixture or twisted warp, plain woollen weft.

No. 101. All-worsted, about 40 sett, 1/32s. warp and 20s. weft ; rough finish ; check.

No. 102. Botany cord ; piece dyed ; 2/70s. cotton warp ; 20 picks, 40s. weft, Australian wool ; smooth finish after dye.

No. 103. 60 sett, 1/50s. cotton warp ; 16 picks, 36s. weft.

No. 104. 52 sett, 1 40s. cotton warp ; 14 picks, 32s. weft.

No. 105. 52 sett, 1/40s. cotton warp ; 14 picks, 32s. weft.

No. 106. 58 sett, 2 60s. silk, and 2 80s. cotton warp ; 18 picks, 32s. worsted weft ; Indian stripes ; figure woven in Jacquard.

No. 107. Heavy tweed ; 40 sett ; woollen warp and weft.

No. 108. Scotch Cheviot cloth, 38 sett.

No. 109. Light pilot cloth ; piece dyed ; fullled and crabbed ; 25s. weft ; about 40 sett.

No. 110. 52 sett, 1/40 cotton warp ; 13 picks, 32s. mixture ; weft made from English wool.

No. 111. 52 sett, 1/40 cotton warp ; 13 picks, 32s. mixture ; weft made from English wool.

No. 112. 52 sett, 1/40 cotton warp ; 13 picks, 32s. mixture ; weft made from English wool.

No. 113. 2/40s. cotton warp, 40 to 48 sett ; woollen weft.

No. 114. 2/150s. cotton warp, 54 sett ; 15 picks, 32s. mohair weft.

No. 115. 2/18s. printed cotton warp ; low woollen weft ; shoddy.

No. 116. 50 sett, 2/60s. cotton warp ; low woollen weft.

No. 117. Heather mixture, end and end cloth, woollen and cotton ; twisted woollen thread for warp ; plain weft crossing ; rough finish.

No. 118. Alpaca figure, 2/40s. cotton warp ; 18 picks, 32s. worsted weft, pine pattern ; woven in Jacquard ; bright lustre finish.

No. 119. All worsted; about 40 sett, 1/32s. warp and 20s. weft; rough finish; check.

No. 120. 2/18s. cotton warp, 28 sett; thick woollen weft (shoddy); milled and shrunk.

No. 121. Estamene twill shalloon, 44 sett, 1/40s. worsted warp; 20 picks, 26s. worsted weft; rough finish.

No. 122. 40 sett, 1/40s. worsted warp, mixture; 16 picks, 18s. mixture weft; diagonal twill.

No. 124. 2/60 cotton warp, 60 sett; 18 to 22 picks, 36s. to 44s. worsted weft, Australian wool; Coburg twill; smooth finish; check.

No. 125. Light woollen self-grey cloth; small twill.

No. 126. Woollen check (union), 44 sett cotton warp; heavy woollen weft.

No. 127. Light worsted cloth; 44 sett worsted warp; single worsted weft; soft wool.

No. 128. Medium union cloth; cotton warp; woollen weft; plain finish.

No. 129. Frieze cloth, 1/16s. warp (cotton); heavy weft (mungo); finish raised; shrunk.

No. 130. Imitation pilot; 32 sett, 2/40s. cotton warp; mungo weft; raised finish; shrunk.

Bradford Stuffs.—(No. 3 Selection).

No. 1. Shalloon twill, large check, 54 sett, 2/60s. soft spun cotton warp; 17 picks, 34s. spundown soft Leicester wool; weft mixed with Southdown to small extent.

No. 2. Shalloon twill, large check, in darker shades; particulars as No. 1.

No. 3. Goods made from 2/36s. cotton warp, 50 sett; 15 picks, 28s. weft; small figure woven in heald engine loom; ordinary finish; brown.

No. 4. Balerno finish, 1/40s. cotton warp, 54 sett; 28s. worsted weft, 17 and 18 picks; blue.

No. 5. Cross twill, 2/60s. cotton warp, 56 sett; 15 and 16 picks, coloured weft, 30/32s. worsted; plain finish; dyed puce.

No. 6. Figured Balerno, diagonal pattern, 58 sett, 1/40s. cotton warp; 18 picks, 30s. to 32s. quality of weft, worsted; brown.

No. 7. Small striped goods, 56 sett, 2/60s. cotton warp; 15 picks, 32s. weft, worsted; bright finish, singed close; woven with serge twill in heald engine, or 8-thread tappet motion.

No. 8. Diagonal pattern, brown, 54 sett, 2/50 cotton warp; 17 picks, 32s. worsted weft; figure woven in Jacquard

No. 9. Small armure pattern, with single end stripe; cotton warp, 2/80s., 60 sett; 14 to 15 picks, 24s. weft, worsted.

No. 10. 2/36s. cotton warp, 50 sett; 15 picks, 28s. weft, worsted; small figure woven in heald engine loom; ordinary finish.

No. 11. Heather mixture, worsted and cotton; plain cotton warp; dyed; plain worsted weft for crossing; rough finish.

No. 12. Shalloon twill, 60 sett, 2/40s. cotton warp; 16 picks, 30s. worsted weft; dry finish; singed.

Nos. 13, 14, 15, 16, 17, 18. Coburg twill, 2/60s. cotton warp, 60 sett; 18 to 22 picks, 36s. to 44s. worsted weft; Australian wools; smooth finish; checks; different sizes and colours.

No. 19. 66 sett, 1/36s. cotton warp; 18 picks, 26s. weft, spun down from 32s. quality of worsted; yarn dyed; finished, fine lustre, but rather soft; woven in Jacquard; small figure; blue.

No. 20. Serge twill, 56 sett, 2/60s. cotton warp; 15 picks, 32s. weft worsted; bright finish, singed close; woven in heald engine.

No. 21. Shalloon twill, 60 sett, 2/40s. cotton warp; 16 picks, 30s. worsted weft from mohair; bright finish; check.

No. 22. Small check shalloon twill; as No. 21.

No. 23. Shalloon twill; as No. 21.

No. 24. 2/80 warp cotton, 50 sett; 15 picks, 32s. worsted weft; finished bright.

No. 25. 1/21s. cotton warp, put end to end in a mail; 16 picks, 32s. mixture weft, 50 sett.

No. 26. 54 sett, 1/36s. mohair warp; 16 picks, 32s. lustre weft, mohair; figured (black); woven in Jacquard.

No. 27. Blue figure; as No. 26.

No. 28. Coburg twill, 2/40s. cotton warp, 56 sett, 24s. worsted weft; spun from a 32s. quality.

No. 29. 2/100 cotton warp; 16 picks, 36s. lustre weft; bright finish; yarn dyed.

No. 30. 54 sett, 1/40s. cotton warp; 15 picks, 32s. coloured weft; trail figure, worked by Harness on surface.

No. 31. 52 sett, 1/40s. cotton warp; 13 picks, 32 mixtures weft; mohair and English wools; check.

No. 32. 52 sett, 1/40s. cotton warp; 13 picks, 32 mixtures weft; mohair and English wools; check.

No. 33. 56 sett, 1/45s. cotton up; 16 picks, 32s. out of 36s. quality; mixture worsted weft; 6 and 8 ends 2/60; silk in stripe; check.

No. 34. 52 sett, 1/40 cotton warp; 13 picks, 22s. mixture weft; made from English wool.

No. 35. Coburg twill, 1/55s. cotton warp, 64 sett; 20 picks, 40s. coloured weft; blue; soft wool, Australian; piece dyed.

No. 36. Grenadine; cotton warp and weft; a dozen ends of the stey crammed, and equal number missed; pattern varied according to steying.

No. 37. 2/36s. cotton warp, 50 sett; 15 picks, 28s. worsted weft; small figure, woven in heald engine loom; ordinary finish.

No. 38. Shalloon twill check, 30s. mixture weft; 15 picks; small cross woven, worked on surface.

No. 39. 50 sett, 2/36s. cotton warp; 15 picks, 28s. worsted weft; small figure, woven in heald engine loom; bright finish.

No. 40. As No. 39.

No. 41. 2/36s. cotton warp, 76 sett; 18 picks, 30s. worsted weft; bright lustre wool; sateen cloth; woven eight-thread, with figure in Jacquard.

No. 42. 2/100s. cotton warp; 16 picks, 36s. lustre weft; bright finish; piece dyed.

No. 43. 1/55 cotton warp; 15 picks, 32s. lustre weft; small figure worked on surface; 50 sett.

No. 44. Grenadine; cotton warp, worsted weft; figure worked on surface.

No. 45. As No. 44.

No. 46. 2/40 cotton warp, 56 sett; small-figured cloth, with twill; 16 picks, 32s. worsted weft.

No. 47. Smaller figure than No. 46; other particulars same.

- No. 48. Smaller figure than No. 46 ; other particulars same.
- No. 49. Broader stripe than No. 46 ; other particulars same.
- No. 50. Broader stripe than No. 46 ; blue shades.
- Nos 51, 52, 53. Same style of goods, in stripes.
- No. 54. Shalloon twill, 60 sett, 2/40s. cotton weft ; 16 picks, 30s. worsted weft ; dry finish ; singed.
- No. 55. 28 sett ; 2 ends in a mail ; 2/40s. cotton warp ; 20 picks, 40s. weft ; Australian wool ; piece dyed.
- No. 56. 52 sett, 1/40s. cotton warp ; 14 picks, 30s. worsted weft.
- No. 57. 2/120s. cotton warp ; 32s. mohair lustre ; figure woven in Jacquard ; bright finish.
- No. 58. 2/100s. cotton warp ; 16 picks, 36s. lustre weft ; bright finish ; piece dyed green.
- No. 59. Heather mixture, worsted and cotton ; yarn dyed ; twilled stripe.
- No. 60. 56 sett, 1/45 cotton warp ; 16 picks, mixture, worsted weft ; 1/30 mohair in check.
- Nos. 61, 62. Indian stripes, 58 sett, 2 60 silk, and 2 '80 cotton warp ; 18 picks, 32s. worsted weft ; figure woven in Jacquard.
- No. 63. 64 sett, 2/60s. ; spun silk warp ; dyed in colours ; 18 picks, 32s. worsted weft ; figure woven in Jacquard.
- No. 64. Small armure pattern, with single end stripe ; cotton warp, 2/80s., 60 sett ; 14 and 15 picks, 24s. weft.
- No. 65. Same make as 64 ; brighter shades.
- No. 66. 2/40s. cotton warp, 52 sett ; 15 picks, 32s., coloured weft ; 3 and 1 twill.
- No. 67. 32 to 48 sett, double ends, usually of double warp cotton, ranging from 2/60s. to 2/80s. counts ; about 18 picks, 32s., 36s., and 40s. weft worsted, and are mostly piece dyed.
- No. 68. 58 sett, 1/36s. cotton warp, or 1/40s. cotton warp ; 16 picks, 30s. weft, 3 and 1 twill woven in four shafts with Coburg tappets ; glaze finish wet ; crabbed 4 inches out of 27 inches ; yarn dyed, but may be made piece dyed ; very nearly same effect.
- No. 69. 54 sett, 1/36s. cotton warp ; 16 picks, 32s., lustre weft ; composed of mohair and English wool ; piece dyed.
- Nos. 70 and 71. 56 sett, 1/36s. cotton warp ; 15 picks, 32s. worsted weft ; soft finish, box weaving, small check.
- No. 72. 80 sett, 2/60s. cotton warp, 32s. alpaca weft ; 18 picks ; figured blue cloth, woven in Jacquard.
- No. 73. 56 sett, 1/50s. cotton warp ; 15 and 16 picks, 32s. mixture worsted weft ; dressed end and end.
- No. 74. 52 sett, 1/36s. cotton warp ; 32s. lustre weft ; composed of mohair and English wool ; 16 picks.
- No. 75. 52 sett, 1/36s. cotton warp ; 32s. lustre weft ; composed of mohair and English wool ; 16 picks.
- No. 76. 1/55s. cotton warp ; 15 picks, 32s. mohair weft ; small figure worked on surface ; 50 sett.
- No. 77. 1/50s. cotton warp, and 2/100s. printed cotton ; dressed end and end ; 15 and 16 picks, 52s. ; melange or mixture weft, 54 sett.
- No. 78. 60 sett, 2/40s. cotton warp ; 16 picks, 30s., worsted weft ; dry finish, singed, shalloon twill.
- No. 79. 54 sett, 1/36s. mohair warp ; 16 picks, 32s. lustre weft mohair ; figure pink, woven in Jacquard.
- No. 80. Mixture or melange twill, 1/40s. cotton warp, 32s. weft ; mixture worsted.

No. 81. Black lustre cloth ; 70 sett, 1/55s. cotton warp ; 34s. lustre weft mohair ; crabbed, finished, and singed ; pressed between hot plates.

No. 82. Mixture lustre cloth ; 56 sett, 50s. cotton warp ; dyed yellow weft ; 32s. worsted ; piece dyed.

No. 83. 44 sett, 2/40s. cotton warp, spun soft ; 14 to 15 picks, 26s. worsted waft ; piece dyed, soft finish.

No. 84. All wool tweed effect in twill cloth, mixture, or twisted warp ; plain woollen weft.

No. 85. Check shalloon twill ; 56 sett, 1/36s. cotton warp ; 13 picks, 32s. coloured worsted weft ; English wool.

Nos. 86, 87, and 88. 52 sett, 2/80s. cotton warp ; 15 picks, 52s. weft worsted ; striped in different colours.

Nos. 89, 90, and 91. 52 sett, 1/40s. cotton warp ; 16 picks, 32s. lustre weft, ground dressed, end and end, stripes crammed ; various colours and shades.

No. 92. 30s. worsted warp, 36 sett, 80s. woollen weft, made from Australian wool ; twill raised on finish.

No. 93. Grenadine plain gauze weaving, 2/150s. cotton warp, and 36s. worsted weft.

Nos. 94, 95, and 96. 2/100s. cotton warp ; 16 picks, 36s. lustre weft ; bright finish, yarn dyed ; different shades of grey cloths.

No. 97. Grenadine ; a very light cloth of gauze formation ; cotton warp and cotton weft ; a dozen ends of the stey crammed and equal numbers missed ; patterns varied according to steving.

No. 98. Grenadine ; a very light cloth of gauze formation ; cotton warp and cotton weft ; a dozen ends of the stey crammed and equal numbers missed ; patterns varied according to steving.

No. 99. Grenadine ; a very light cloth of gauze formation ; cotton warp and cotton weft ; a dozen ends of the stey crammed and equal numbers missed ; patterns varied according to steving.

No. 100. Grenadine plain gauze, weaving cotton warp, 2 250s. ; 36s. worsted weft.

No. 101. Fine gauze, wove from gum silk warp, and 24s. worsted weft ; Challi finish.

No. 102. Grenadine, wove in gauze heels.

No. 103. 66 sett, 1/36s. cotton warp ; 18 picks, 32s. weft worsted ; yarn dyed, finished lustre fine ; olive colour.

No. 104. 2/100s. cotton warp ; 16 picks, 36s. lustre weft ; bright finish, piece dyed (olive) ; figure woven in Jacquard.

No. 105. 2/100s. cotton warp ; 16 picks, 36s. lustre weft ; bright finish, piece dyed (black) ; figure woven in Jacquard.

No. 106. Descriptions as No. 105 ; figures, small and large, woven in Jacquard.

No. 107. Descriptions as No. 105 ; figures, small and large, woven in Jacquard.

No. 108. Descriptions as No. 105 ; figures, small and large, woven in Jacquard.

No. 109. Check mixture cloth, made from English wool ; 52 sett, 1/40s. cotton warp ; 13 picks, 32s. worsted weft.

No. 110. Check mixture cloth, made from English wool ; 52 sett, 1/40s. cotton warp ; 13 picks, 32s. worsted weft.

No. 111. Check mixture cloth, made from English wool ; 52 sett, 1/40s. cotton warp ; 13 picks, 32s. worsted weft.

No. 112. Check mixture cloth, made from English wool; 52 sett, 1/10s. cotton warp; 13 picks, 32s. worsted weft.

No. 113. Shalloon twill, 2/36s. cotton warp, 50 sett; 15 picks, 28s. worsted weft, picked 4 and 4; warp dressed, fancy, smooth finish.

No. 114. Shalloon twill, fancy check, smooth finish; 2/36s. cotton warp, 56 sett; 16 picks, 30 32s. worsted weft.

No. 115. Shalloon twill, fancy check, smooth finish; 2/40s. cotton warp; 52 sett; 16 picks, 32s. worsted weft.

No. 116. Croquet check, shalloon twill; 48 sett to 52 sett, 2/40s. cotton warp; 16 picks, 32s. worsted weft.

No. 117. Light worsted cloth; 44 sett, worsted warp, single worsted weft; soft wool.

No. 118. Lustre cloth; are made in various setts, from 56 to 64, or from 62 to 70 threads per inch in warp. The warp is cotton, usually single twisted, about 50s. to 55s.; sometimes 100s. to 120s. double twist is used. The weft is 32s., 34s., or in some instances 36s. single, made from English wool hogget lustre (*i.e.*, Lincoln, Leicester, Nottingham, and Yorkshire), and mixed to a small extent with fine mohair. The goods are crabbed—that is, shrunk—about 10 to 12½ per cent. in the finish and singed—pressed between hot plates.

No. 119. Particulars as No. 118.

No. 120. Lustre cloth, in the grey or unfinished state; 54 sett, or 60 threads to the inch, 1/28s. printed cotton warp, plain finish, not shrunk; 15 picks, 30s. single combed worsted weft, made from English wool, Lincoln and Yorkshire sorts.

No. 121. Coburg twill cloth, made from Australian wool, as coloured weft, 40s.; 1/55s. cotton warp; 64 sett; 20 picks; piece dyed.

No. 122. Coburg twill cloth made from Australian wool as coloured weft 40s.; 1 55s. cotton warp; 64 sett; 20 picks; piece dyed.

No. 123. Botany cord, sateen stripe; Botany warp and weft.

No. 124. Botany cord, sateen stripe; Botany warp and weft.

No. 125. Botany cord, sateen stripe, and cord ground; cotton warp, with 80s. Botany weft.

No. 126. Particulars as 125.

No. 127. Light woollen cloth; small twill.

No. 128. Heavy pilot cloth; piece dyed, full and crabbed.

No. 129. Heavy tweed; 40 sett, woollen warp and weft.

No. 130. Scotch Cheviot; 38 sett, coloured warp, plain weft.

No. 131. 76 sett, 2/150s. cotton warp; 17 picks, 36s. lustre weft, from English wool; smooth finish; black.

No. 132. As No. 131; scarlet colour.

No. 133. Shalloon check twill; 54 sett, 2/60s. soft spun cotton warp; 44s. soft spun weft; made from Australian wool.

No. 134. Grey Coburg; all wool weave, 1/44s., spun from 80s. quality soft wool warp; 44s. to 50s. soft yarn.

No. 135. 1/55s. cotton warp, 64 sett; 20 picks, 40s. coloured weft, soft wool Australian; Coburg twill; piece dyed; (black).

No. 136. As No. 135; light blue.

No. 137. As No. 135; dark green.

No. 138. As No. 135; dark blue.

No. 139. 1/50 cotton warp; 20 picks, 40s. Botany weft; small figure raised by Harness.

No. 140. Botany cord, piece dyed; 2/70s. cotton warp; 20 picks, 40s. weft, Australian wool.

No. 141. Sateen cloth; 2,36s. cotton warp, 76 sett; 18 picks, 32s. worsted weft, bright lustre wool, wove 8-thread sateen, with figure in Jacquard.

No. 142. Coburg twill; 1/55s. cotton warp, 64 sett; 20 picks, 40s. coloured weft, soft wool (Australian); piece dyed.

No. 143. These goods are made from 48s. sett; double ends, usually of double warp cotton, ranging from 2/60s. to 2/80s.; counts about 18 picks, 32s., 36s., or 40s. weft worsted; are mostly piece dyed.

No. 144. Particulars as No. 134.

No. 145. Coburg twill; piece dyed, (dark green); 1/55 sett, 64 sett; 20 picks, 40 Botany weft.

No. 146. Particulars as No. 145; black.

No. 147. Light worsted cloth; 44 sett worsted warp, single twisted weft, soft wool.

No. 148. 28 sett, 2 ends in mail, 2/40s. cotton warp; 20 picks, 40s. weft Australian wool; piece dyed, (black).

No. 149. Figured Balerno cloth; 54 sett, 2/50s. cotton warp; 17 picks, 32s. worsted weft; figured in Jacquard loom.

No. 150. Figured cloth, wove in Jacquard; 80 sett, 2/60s. cotton warp; 32s. Alpaca weft, 18 picks.

No. 151. All-worsted, about 40 sett, 1/32s. warp, and 40s. weft, Australian wool, woven in box loom; bright finish.

No. 152. Plain light cloth; 44 sett worsted warp, single worsted weft, soft wool, finished.

No. 153. Worsted cloth (heavy), diagonal; made from English and Australian wools.

No. 154. Botany cord; piece dyed, 1/32s. warp, worsted, and 20s. soft spun Australian.

No. 155. Estamene twill; 48 sett, 2/60s. spun soft English wool warp; 18 picks, 28s. soft wool weft. Australian wool may be used preferably for weft, but should be of coarse description. Finish of goods shrunk and rough on face.

No. 156. Light worsted; 42 sett, worsted warp; single worsted weft, soft wool.

No. 157. Figured worsted cloth; all wool warp, 2/60s. to 2/70s. Cape wool, about 48 sett; 16 picks, 30s. weft, made from fine lustre, with a sliver of silk or alpaca run through in preparing.

No. 158. Large check; 54 sett, 2/60s. soft spun cotton warp; 17 picks, 30 to 40s. spun down soft Leicester weft wool, mixed with Southdown to small extent.

No. 159. Shalloon twill; 2/40s. cotton warp, 52 sett; 18 picks, 32s. coloured weft.

No. 160. Figured pine pattern worsted cloth, 2/100s. cotton warp, 60 sett; 17 picks, 36s. worsted weft, hogget lustre; woven in Jacquard.

No. 161. Alpaca figured cloth; 2/140s. cotton warp; 18 picks, 32s. worsted weft; pine pattern; woven in Jacquard; bright lustre finish.

No. 162. Small twill, 50 sett, 2/60s. cotton worsted weft, soft spun.

No. 163. Botany cord, sateen stripe; piece dyed; 2/70s. cotton warp; 20 picks, 40s. weft, Australian wool; smooth finish after dye.

No. 164. Botany cord, made from Australian wool; 40 sett, soft spun; rough finish.

No. 165. Botany cord, made from Australian wool, 40 sett, 40s.; smooth finish after dye.

No. 166. Shalloon twill; 44 sett, cotton warp, 2/40s., spun soft,

with few turns to the inch; 14 to 15 picks, 26s. demi-lustre weft; piece dyed and soft finish.

No. 167. Plain worsted stuff goods, 32 to 48 sett, double ends; usually of double warp cotton, ranging from 2/60s. to 2/80s. counts; 18 picks, 32, 36, or 40s. weft worsted; mostly piece dyed.

No. 168. As No. 167.

No. 169. Check mixture worsted cloth; 1 40s. cotton warp, 56 sett; 15 picks, 32 mixture worsted weft.

No. 170. 56 sett. 1 45s. cotton warp or 2 140s. cotton weft; 16 picks, 52s. out of 36s. quality, mixture worsted weft, six and eight ends; 2/60s. silk in stripe; check, plain treading.

No. 171. Shalloon twill, fancy check, ordinary finish; 2/40s. cotton warp, 54 sett; 16 picks, 32s. weft worsted.

No. 172. Shalloon twill, fancy check, smooth finish; 2/36s. cotton warp; 17 picks, 32s. coloured worsted weft.

No. 173. Shalloon twill check, plain finish; 2/36s. cotton warp, 52 sett; 32s. worsted weft.

No. 174. Shalloon twill check, 2/36s. cotton warp, 52 sett; 32s. worsted weft; plain finish.

No. 175. Twill check, 2/60s. cotton warp, 54 sett; 16 picks, 30 32s. worsted weft; plain smooth finish.

No. 176. Grenadine; cotton warp and weft; woven in gauze healds.

No. 177. Single striped worsted stuff, 52 sett, 1/40s. cotton warp; 14 picks, 32s. worsted weft.

No. 178. Double striped worsted stuff, 52 sett, 1/40s. cotton warp; 14 picks, 32s. worsted weft.

No. 179. Double striped worsted stuff, 60 sett, 1/50s. cotton warp; 16 picks, 36s. worsted weft.

No. 180. Plain goods, double cotton warp, ranging from 2/60s. to 2/80s. counts; about 18 picks, 32, 36, and 40s. worsted weft; mostly piece dyed.

No. 181. 2/150s. cotton warp, 54 sett; 15 picks, 30s. mohair weft; figured cloth.

No. 182. 54 sett, 1/40s. cotton warp; 15 picks, 32s. coloured weft; figure worked by Harness on surface.

No. 183. Lustre figured cloth, 56 sett, 1/50s. cotton warp; 32s. worsted weft, hogget lustre, with little mixture of mohair.

No. 184. 2/90s. cotton warp and 2/80s. silk warp, put two ends in a mail; 17 picks, mixture weft 36s.; broken twill—cross twill, as it is more frequently found.

No. 185. 2/36s. cotton warp, 50 sett; 15 picks, 28s. weft worsted; small figure woven on heald engine-loom; ordinary finish.

No. 186. 54 sett, 2/140s. warp, cotton; 16 picks, 36s. lustre weft; piece dyed; figure raised.

No. 187. Check goods, arranged in warp and weft; 2/60s. cotton warp, 36s. worsted weft; dyed in yarn.

No. 188. Small check, as No. 187.

No. 189. Small check, 2/80s. warp and 1/36s. cotton warp mixed, 50 sett; 15 picks, 32s. mixture weft; bright finish.

No. 190. Small check, 2/80s. warp and 1/36s. cotton warp mixed, 50 sett; 15 picks, 32s. mixture weft; bright finish.

No. 191. 2/80s. print warp and 1/36s. cotton warp mixed, 50 sett; 15½ picks, 32s. mixture weft; bright finish.

No. 192. 52 sett, 2/80s. print warp cotton, 2/80s., blackened; 15 picks, 32s. mixture weft; spot printed in after woven; bright finish.

No. 193. 56 sett, 1/36s. cotton warp; 15 picks, 32s. worsted weft; soft finish; shalloon twill; check; box weaving.

No. 194. Shalloon twill, 68 sett, 2 60s. cotton warp; 17 picks, 32s. worsted weft, yarn dyed; half-lustre finish; singed.

No. 195. 60 sett, 2/60s. cotton warp; 17 picks, 32s. worsted weft; shalloon twill; check; box weaving.

No. 196. 54 sett, 2/60s. soft spun cotton warp; 17 picks, 30 and 34s. spun down soft Leicester wool weft, mixed with Southdown to a small extent.

No. 197. 44 sett, 2/40s. cotton warp; 14 to 15 picks, 26s. demi-weft; piece dyed; shalloon twill.

No. 198. These cloths are made from 58 to 64 sett, 2/60s. soft cotton warp; 18 to 22 picks, 44s. to 50s. soft yarn, spun out of 50s. from Australian wool; woven in Jacquard loom.

No. 199. 54 sett, mohair lustre, figure woven in Jacquard in heald motion.

No. 200. 2/200s. cotton warp; 16 picks, 36s. lustre, weft; bright finish; yarn dyed.

No. 201. All wool Coburg weave; 1/44s., spun from 80s. quality, soft wool warp, 56 sett; 17 picks, 44 to 50s., soft yarn.

No. 202. Shalloon twill, 64 sett, 2/80s. cotton warp; 16 picks, 32s. worsted weft.

No. 203. Shalloon twill, 64 sett, 2/80s., cotton warp; 16 picks, 32s. worsted weft.

No. 204. Shalloon twill, 64 sett, 2/80s. cotton warp; 16 picks, 32s. worsted weft.

No. 205. 54 sett, in grey or unfinished, or 60 threads per inch; 1/28s. printed cotton warp; plain finish; 15 picks, 30s. single-combed worsted weft; made from English wools—Lincoln and Yorkshire.

No. 206, 207, 208, and 209. Figured goods, 54 sett, in grey or unfinished or 60 threads per inch; 1/28s. printed cotton warp, plain finish; 15 picks, 30s. single-combed worsted weft; made from English wools—Lincoln and Yorkshire.

No. 210. All wool fancy crêpe cloth, woven in plain healds for ground, and gauze for stripe, into two reeds, mixed in the sley at every stripe opening.

No. 211. Brown mixture, end and end cloth, woollen and cotton; twisted woollen thread for warp, plain weft for crossing; rough finish.

No. 212. All worsted check cloth, about 40 sett, 1/32s. warp and 20s. weft; rough finish.

No. 213. All worsted check cloth, as No. 212.

No. 214. Heather mixture, end and end cloth, woollen and cotton; twisted woollen thread for warp, plain weft for crossing; rough finish.

No. 215. Diagonal twill, 40 sett, 1/40s. worsted warp mixture; 16 picks, 18s. mixture weft.

No. 216. Heather mixture, end and end cloth, woollen and cotton; twisted woollen thread for warp, plain weft for crossing; rough finish.

No. 217. Plain dark brown goods are made from 32s. to 48s. sett, double ends, usually of double warp cotton, ranging from 2/60 s. to 2 80s. counts; 18 picks, 32s., 36s., or 40s. weft worsted; are mostly piece dyed.

No. 218. Shalloon twill, fancy check, smooth finish, 2/36 s. cotton warp; 17 picks, 32 s. coloured worsted weft.

No. 219. As No. 218.

No. 220. Dark blue Coburg twill, piece dyed, 1/55s. cotton warp, 64 sett; 20 picks, 40 coloured weft soft wool; Australian.

No. 221. Lustre cloth, 64 sett, cotton warp, 55s. weft, 34s. worsted, from English wools.

No. 222. Fine gauze, wove from gum silk warp; 24s. worsted weft; rough finish.

No. 223. 28 sett, two ends in a mail, 2/40s. cotton warp; 20 picks, 40s. weft; Australian wool; piece dyed.

No. 224. 58 sett, 1/36s. cotton warp or 1/40s.; 16 picks, 30s. weft, 3 and 1 twill; woven in four shafts with Coburg tappets; glaze finish, wet; crabbed 4 inches out of 27 inches; yarn dyed; very nearly same effect.

No. 225. Figured cloth, woven in Jacquard, 54 sett, 2/50s. cotton warp; 17 picks, 32s. worsted weft.

No. 226. 66 sett, 1/36s. cotton warp; 18 picks, 26s. weft spun down from 32s. quality of worsted; yarn dyed; finished lustre; fine, but rather soft.

No. 227. Shalloon twill, two up and two down, made in 56 sett; 1/36s. cotton warp; 13 picks, 32s. coloured worsted weft; English wool; dry finish; half poplin.

No. 228. 54 sett, 1/40 cotton warp; 15 picks, 32s. coloured weft; trail figure worked by Harness on surface.

No. 229. Coburg twill, 1/55s. cotton warp, 64 sett; 20 picks, 40s. coloured weft, soft wool; Australian; piece dyed blue.

No. 230. Shalloon twill, 55 sett, 1/36s. cotton warp; 13 picks, 32s. coloured worsted weft, English wool; dry finish; half poplin; large check.

No. 231. As No. 230; check.

No. 232. Poplin finish; plain rep, 2/36s. to 2/80s. cotton warp; 14 picks, 30s. worsted weft; brown.

No. 233. Poplin finish, plain rep, 2/36s. to 2/80s. cotton warp; 14 picks, 30s. worsted weft; blue.

No. 234. Estamene twill (shalloon), 44 sett, 1/40s. worsted warp; 20 picks, 26s. worsted weft; rough finish.

No. 235. 52 sett, 1/40s. cotton warp; 14 picks, 32s. worsted weft; figure woven in Jacquard.

No. 236. 76 sett, 2/150s. cotton warp; 17 picks, 36s. lustre weft; made from English wool; smooth finish.

No. 237. 1/50s. cotton warp, with end white, or print here and there; 16 picks, 30s. worsted weft; cross-dyed, figure woven in Jacquard.

No. 238. 56 sett, 1/45s. warp cotton; 16 picks, 30s. worsted weft; two ends print for stripe; figure worked in Jacquard.

No. 239. Figured balerno, diagonal pattern, 58 sett, 1/40 cotton warp; 18 picks, 30s. from 32s. quality of weft worsted.

No. 240. Light worsted cloth, 44 sett worsted warp; single worsted weft; soft wool.

No. 241. Heather mixture, end and end cloth, woollen and cotton; twisted woollen thread for warp, plain weft crossing; rough finish.

No. 242. Heather mixture in blue. Particulars as No. 241.

No. 243. Heather mixture in grey. Particulars as No. 241.

No. 244. Heather mixture in scarlet. Particulars as No. 241.

No. 245. Figured Balerno, diagonal pattern, 58 sett, 1/40s. cotton warp; 18 picks, 30s. from 32s. quality of weft worsted; unfinished.

No. 246. 76 sett, 2/150 s. cotton warp; 17 picks, 36s. lustre weft; made from English wool; bright finish.

No. 247. Made in 70 or 68 sett, 2 70s. cotton warp; worsted weft, 32s.; 15 picks, in quarter inch; made from English wool; half lustre finish; small cheek.

No. 248. 68 sett, 2/60 cotton; 15 picks, 30s. worsted weft; half poplin finish; Armure pattern, worked in heald engine.

No. 249. Shalloon twill, 44 sett, 2 40s. warp cotton, spun soft with few turns to the inch; 14 and 15 picks, 26s. demi; piece dyed blue, and soft finish.

No. 250. As No. 249; piece dyed black.

Nos. 251, 252, and 253. These cloths are made from 58 to 64 sett, 2/60s. soft cotton warp; 18 to 22 picks, 44s. or 50s. soft yarn, spun out of 50 quality, and made from Cape and Australian merino wools; woven twill serge, with tappets and piece-dyed black, with dull finish.

No. 254. Union cloth, 2 40s. cotton warp, 40 to 48 sett, woollen weft.

No. 255. Worsted brown mixtures, end and end cloth.

No. 256. Woollen and cotton; twisted woollen thread for warp, plain weft for crossing; finished fine.

No. 257. 1/55 cotton warp; 15 picks, 32 mohair weft; small figure worked on surface, 5 sett; black.

No. 258. 54 sett, 1 36s. cotton warp; 16 picks, 32s. lustre weft; composed of mohair and English wool.

No. 259. 76 sett, 2 150 cotton warp; 17 picks, 36s. lustre weft; made from mohair; bright finish.

No. 260. Cotton warp, 2 36s.; 50 sett, 15 picks, 28 worsted weft; shalloon twill, warp dressed, fancy; rough finish.

No. 261. Large cheek, 54 sett, 2 60s. soft spun cotton warp; 17 picks, 30s. to 54s. spun down soft Leicester wool weft; mixed with Southdown to a small extent.

No. 262. Large cheek, 54 sett, 2/60s. soft spun cotton warp; 17 picks, 30s. to 54s. spun down soft; Leicester wool weft; mixed with Southdown to a small extent.

No. 263. Large cheek, 54 sett, 2/60s. soft spun cotton warp; 17 picks, 30s. to 54s. spun down soft; Leicester wool weft, mixed with Southdown to a small extent.

No. 264. Large cheek, 54 sett, 2 60s. soft spun cotton warp; 17 picks, 30s. to 54s. spun down soft Leicester wool weft, mixed with Southdown to a small extent.

Bradford Stuffs—(Damasks, in folding cases).

Twenty-four specimens of damask cloths, in most beautiful designs and brilliant colours, representing an important branch of the heavy fancy worsted trade in Bradford and Halifax, are made from low English lustre wools. The figures are raised and woven in Jacquard looms. Damasks were formerly made from silk only, and manufactured in Damascus, from whence they derive the name. The present generation of long-wool manufacturers, finding the old method of making these goods tedious, and material expensive, have invented machinery capable of producing this class of goods in any conceivable pattern, however richly embellished and coloured, from deep grown lustre wools, as Lincoln, Yorkshire, Leicester, which are used as curtains, tablecloths, cushion coverings, and for furniture purposes.

No. 265. Very neat design, with black foundation, wild rose pattern, raised yellow-gold with red edges.

No. 266. Design as 265; puce ground, figures in green, edged with red.

No. 267. Design as above; blue foundation, pattern in gold and scarlet.

No. 268. Foundation dark green, with light green lustre figures.

No. 269. Dark brown ground, pattern floral in yellow, gold, and red.

No. 270. Black foundation, green leaves and flowers and butterfly.

No. 271. Crimson foundation, small floral pattern, in light crimson lustre.

No. 272. Pattern as 271, black ground; figures in bright yellow-gold.

No. 273. Same pattern; brown foundation.

No. 274. Floral design in bright yellow, dark green ground.

No. 275. Red foundation, floral pattern in yellow and black.

No. 276. Design, flowers in gold; very rich blue foundation.

No. 277. Flowers shaded in brown, on bright silver lustre.

No. 278. Gold ground pattern, as 277, in purple.

No. 279. Same pattern with brown; blue foundation.

No. 280. Figures in various colours and shades—black, light blue, pink, on yellow-gold.

No. 281. Silver lustre ground and shaded floral; small flowers, in light blue, pink, mauve, and black.

No. 282. Floral in red, blue, black, mauve, and green, on bright lustre figured foundation.

No. 283. Ground black, bold floral in yellow and red, with bird in gold and dull green.

No. 284. Design, floral and figured on dull green, on bright gold.

No. 285. Beautifully designed fern in rich gold, with wild flowers; dark blue, red, edge gold, on blue foundation.

No. 286. A striped pattern, black and gold, on blue ground,

No. 287. Floral design, yellow and black, red foundation.

No. 288. Shaded floral ground, mauve and brown, relieved with gold and green leaves.

Hosiery Yarns—(In glazed frame.)

One of the most interesting collections in the Museum, consisting of a variety of hosiery knitting yarns, representing 246 specimens of different colours and various shades. From Messrs. J. Paton, Son, & Co., Worsted Spinners, Alloa, Scotland; presented by Mr. Lister Henry, 56 Clarence-street, Sydney.

These specimens give a good representation of soft yarns; and, on account of their superior get up, the supply in Sydney and Melbourne is not equal to the demand. These yarns take the class of wool that comes between a short clothing and combing, and is required to be soft, kind, and pliable, of the purest white, so as to take the most delicate dyes.

Double show-case, containing parts of machinery used in preparing and spinning merino wools on the Bradford and French systems; also the wool as it passes through the various processes in the course of manufacturing. The machinery was made and presented by Messrs. Platt Bros. & Co., Limited, Oldham, Lancashire, England, through Mr. C. E. Ascroft, The Exchange, Sydney.

387 F.*French System.*

(The wool samples are from Messrs John Smith & Sons, Field Head Mills, Bradford, Yorkshire, England).

- No. 1. Sample of unwashed Australian merino wool.
- No. 2. Sample of washed do. do.
- No. 3. Bobbin from 1st drawing frame (2nd passage).
- No. 4. Do. 2nd do. (3rd do.).
- No. 5. Do. 3rd do. (4th do.).
- No. 6. Do. 1st intermediate frame (7th passage).
- No. 7. Do. 2nd do. (8th do.).
- No. 8. Do. finishing roving (10th passage).
- No. 9. Four cops from self-acting mule.
- No. 10. Six bobbins from doubling frames.
- No. 11. One hank of double yarn.
- No. 12. Two mule spindles.
- No. 13. One porcupine for 1st drawing frame.
- No. 14. Do. 3rd do.
- No. 15. Do. slubbing frame.
- No. 16. Do. finishing roving frame.
- No. 17. Section of front bottom roller for roving frame.
- No. 18. Do. back do. do.
- No. 19. Card with yard lapped round.

[Carding and combing are not represented.]

388.*Bradford System.*

- No. 1. Sample of unwashed Australian merino wool.
- No. 2. Do. washed do. do.
- No. 3. Bobbin from two-spindle gill box (3rd passage).
- No. 4. Do. do. drawing frame (4th passage).
- No. 5 and 6. Bobbin from finishing frames (6th passage).
- No. 7. Bobbin from dandy reducing frame (8th do.).
- No. 8. Do. dandy roving frame (9th do.).
- No. 9. Six spools from cap spinning frame (10th do.).
- No. 10. Samples in book-form of fancy doubled yarns.
- No. 11. Empty bobbins for spinning and twisting frames.
- No. 12. Faller for Little and Eastward's 3 x 3 circular Nip Combing Machine.
- No. 13. Three fallers for gill boxes.
- No. 14. One spindle and flyer for gill box.
- No. 15. Do. do. finishing frame.
- No. 16. Do. do. roving frame.
- No. 17. Do. do. dandy roving.
- No. 18. Danforth spindle and caps for cap spinning frame.
- No. 19. One spindle, step, collar, and flyer for flyer spinning frame.

[Carding and combing are not represented.]

2.—CLOTHING OR SHORT-WOOL MANUFACTURES.

Woollen Manufactures.

(In various stages.)

Having gone through the worsted or combing wool department, we now follow on to collections from the woollen or short-wool manufactures; these are represented by several instructive exhibits, from wool to the finished articles. The first is from Messrs. Cochrane Bros., Cloth Manufacturers, Galashiels, Scotland.

14,702-5.

Nos. 1 to 6. Merino clothing, from greasy to washed.

14,706.

No. 7. Wool dyed black for mixtures.

14,707.

No. 8. Wool scoured hard and willowed or teased, ready for the carding machine.

14,706.

No. 9. Mixed white and black, ready for carder.

14,708.

No. 10. Carded wool, white, prepared for condensing.

14,708.

No. 11. Carded wool, gray, mixed as No. 9, for condensing.

14,709.

No. 12. White condensed sliver. The condensing machine is attached to the carder, the wool being stripped off by a ring of doffers off the condensers. The object is to reduce into compact slivers the sheet of fibres delivered from the carding machine. By pressure and friction, it divides the material into series of soft round flabby threads, called slivers, giving them great uniformity, which enables them to stand the twisting process.

14,710.

No. 13. Gray condensed, ready for spinning.

14,711.

No. 14. Spun yarn ready for reeling into hanks.

14,712.

Nos. 15 and 16. White and gray yarn reeled into hanks ready for scouring.

14,713.

No. 17. White yarn scoured.

14,714.

Nos. 18 and 19. Black and brown dyed yarns in hanks.

14,715.

Nos. 20, 21, and 22. White, black, and brown yarns, winded ready for twisting. No. 20 is much finer spun, being 60 sett or count, others 42 s.

14,716.

Nos. 23, 24, 25, and 26. Yarns on double-headed bobbins for warping.

14,717-18.

Nos. 27, 28, 29, 30, and 31. Different colours of yarns on bobbins ready for the shuttle for weaving.

14,719.

No. 32. Four patterns of unfinished cloth, made from Saxony wool.

14,720.

No. 33. Four patterns of finished cloth, made from Saxony wool.

14,721.

No. 34. Two patterns of unfinished cloth, made from Cheviot wools.

14,722.

No. 35. Two patterns of finished cloth, made from Cheviot wool.

As an illustrative collection of the use of the merino short or clothing wools, that of **Messrs. Raistrick and Sons, Brackendale Mills, Thackley, near Bradford, Yorkshire, England**, is the most complete, representing the course of manufacturing from greasy wool to the finest finished green billiard cloths, &c.

15,060.

Nos. 1, 2, and 3. Very superior clothing wool in grease.

15,061.

No. 4. Scoured merino.

15,062.

No. 5. Scoured wool, "willowed," *i.e.*, a process of opening or teasing, previous to carding.

15,063.

No. 6. Carded wool.

15,064.

No. 7. Slubbing or condensed wool.

15,065.

No. 8. Warp yarn, which forms the foundation of the piece in weaving. Warping is the first process yarn undergoes, passing on to the loom. It consists of collecting into one body, and of reducing to one uniform length, those threads which are intended to be stretched longitudinally in the cloth. Sizing is the next process, which is passing the warp through a glutinous substance, the object being to cause the individual fibres composing the threads to cling more tenaciously together. The warp is afterwards dried and beamed. The beaming operation is commenced by drawing the warp footing end first over a rail, carrying it forward to the loom beam, passing through a raddle, which maintains the warp at one required width, and opens the warp threads as they are wound on to the beam. A raddle is a wooden bar, mounted with a series of pegs set at equal distances, through which the threads pass. The next operation is healding or drawing in, which simply implies that the warp ends are entered in regular succession through loops of the healds. After healding, the object is to keep the threads of warp at equal distances, during the whole process of weaving by a sley or weaver's reed, which is divided into very fine splits through which the threads pass.

15,066.

No. 9. Weft yarn, spun ready for weaving, which is a much lighter yarn than the warp, and is interwoven into the interior of the warp, and forms cloth.

15,067.

No. 10. Cloth before taken out of loom, in a greasy state.

15,068.

No. 11. Cloth after taken out of loom, and seoured.

15,069.

No. 12. Milled or full'd cloth. Milling is a mode of simply increasing bulk. It is done by soaking the cloth in soap and water, passing on through vertical rollers in a twisted condition, afterwards it is detained in a kind of box for some time, then liberated. While the cloth is in the box, the fabric shrinks, loses the traces of the threads, and handles firm and soft.

No. 13. Nineteen samples of cabinet cloths, dyed into different shades, and finished ready for sale.

No. 14. Seven samples of coatings dyed in piece in dark shades, and finished.

No. 15. Three samples of billiard-cloth greens in different shades. The fabrics require the finest merino clothing wool, and must be of good colour, to give the proper shade.

Having gone through the collections of imported manufactured goods, it is a most pleasing duty to be in a position to give particulars of exhibits of Colonial make, which are very well represented—first, by a collection of wool and woollen manufactures, which was exhibited to illustrate the woollen industry of this Colony, and was prepared at the

instance and cost of the Commissioners for New South Wales for the Calcutta International Exhibition of 1884, by Messrs. J. Vicars & Co., of Sydney. At the close of the Exhibition it was presented to this Museum by the Commissioners.

7,698.

Nos. 1 to 4. Merino clothing wool, from greasy, scoured, brown and grey.

7,701.

Nos. 5 to 8. Dyed merino, in different colours.

No. 9. Soft yarns, in white and different shades of natural grey.

Nos. 10, 11, and 12. Yarns in white; also, dyed in plain colours.

Nos. 13 and 14. Yarns (two-fold) twisted for the fancy trade.

7,705-7.

No. 15. White twilled cricketing cloth.

No. 16. Self-grey cloth, which is the natural colour of the so-called black wool.

No. 17. Scarlet cloth, plain weave.

No. 18. Small check trousering.

Nos. 19 and 20. Buckskin cloths. In making buckskins, it is essential to show a clear, decided twill. Care should always be taken to cause the twisting of the fibres in the threads to cut the direction of the twill in the wave through the warp and not weft.

Nos. 21 and 22. Indigo cloth, dyed in wool.

Nos. 23 and 24. Large checked cloths.

Nos. 25, 26, 27, and 28. Small checks.

Nos. 29 and 30. Hair-cords, or hair-line cloth, so called on account of its small respective stripes.

Nos. 31, 32, and 33. Mixture, in different greys, twilled cloth; so called from small ridges running in the cloth, which arises from every pick of regular twill being simply a model of the first, moved either one thread to the left or right of its predecessor, according to the direction of the twill.

Nos. 34 and 35. Plaid shawls, in black and white yarns.

A complete collection, showing all the stages in the manufacture of tweed cloth, from Coerwull Tweed Company, Bowenfels, N.S.W.

Nos. 1 and 2. Greasy and scoured merino.

Nos. 3 and 4. Locks, greasy, willeyed, and scoured.

Nos. 5 and 6. Burry wool, and after being willowed and burred.

Nos. 7 to 11. Dyed wools.

Nos. 12 to 16. Carded sliver, in different colours.

Nos. 17 and 18. Black and white condensed sliver—first formation of thread.

No. 19. Seven bobbins of assorted yarns (coloured) ready for weaving.

Nos. 20 and 21. Tweed unfinished cloth, as taken out of loom.

Nos. 22 and 23. Tweed cloth, scoured and finished ready for sale.

Heavy Woollen Cloths.

(Finished Goods.)

These goods are made mostly in the Huddersfield, Batley, and Dewsbury Districts, Yorkshire, and are wool-dyed; fancy trouserings, coatings, &c.

No. 1. A heavy fancy trousering, wool dyed, smooth finish, check pattern.

No. 2. Check pattern; a very heavy make, mixed with a little shoddy.

No. 3. Nice brown check cloth; all-wool; heavy tweed.

No. 4. Scotch Cheviot, made from Scotch border wool.

No. 5. Self-grey (commonly called black wool) diagonal cloth. This cloth is made from pure wool without any mixture.

No. 6. Steel-grey twill; a mixture of white and black dyed wool.

No. 7. A union, double-faced, composed of cotton warp with very low nail and shoddy weft; worn as overcoats.

No. 8. A very low tweed (Scotch).

No. 9. Dark check coating; all-wool finished.

No. 10. Mixture beaver cloth, raised finish.

No. 11. Low Scotch diagonal tweed.

No. 12. Heavy tweed; finished.

No. 13. Scotch Cheviot.

No. 14. Heavy tweed, soft finish.

No. 15. Diagonal self-grey cloth.

No. 16. Low beaver cloth, with raised nap.

No. 17. Light pilot cloth, fulled and crabbed.

No. 18. Union printed cotton warp, low woollen shoddy weft.

Nos. 19 and 20. Low heavy Scotch tweed, in stripes.

No. 21. Astracan cloth, used as winter jackets and overcoats, and made of cotton warps, with very low wools or hair, to represent skins of different animals.

No. 22. As No. 21, with short hairy surface.

No. 23. Very low Astracan; surface raised; finished.

No. 24. Imitation sealskin.

No. 25. Very low union; cotton warp, shoddy weft.

No. 26. Very low Scotch tweed.

Nos. 27 and 28. Imitation sealskin.

No. 29. Black, raised overcoating; cotton warp, hair weft.

No. 30. Beaver nap, of inferior quality; cotton warp, shoddy weft.

No. 31. Black nap cloth; very heavy cotton warp, hair weft.

No. 32. Small nap black cloth.

No. 33. Reversible cloth; cotton warp, hair weft.

No. 34. Black Astracan; cotton warp and hair weft.

No. 35. Black cloth, with very large, heavy nap of hair weft and cotton warp.

No. 36. Figured imitation figured sealskin; cotton warp, low wool weft.

3.—PHOTOGRAPHS OF MACHINERY.

Photographs of Machinery used in the Manufacture of Worsted (combing) and Clothing (short wool) Fabrics.

A.—*Worsted.*

No. 1. Single lap machine, with improved feed regulator; makers, Messrs. Asa Lees & Co. (Limited), Soho Iron Works, Oldham, Lancashire.

No. 2. Single carding engine, with rollers and cleaners; makers, the same as No. 1.

No. 3. Improved worsted carding engine, with balling-head attached.

No. 4. Single carding engine, with self-acting revolving flats; cylinder, 50 inches diameter; 100 flats, $1\frac{1}{2}$ inches wide, or 73 flats, 2 inches wide; cylinder, $54\frac{1}{2}$ inches diameter; 90 flats, $1\frac{1}{2}$ inches wide; 64 flats, 2 inches wide.

No. 5. Improved single carding engine for wool.

No. 6. Improved couple scribbler carding engine.

No. 7. Combing machine.

No. 8. Improved patent motion for carding engines, drawing frames, &c.

No. 9. Drawing frame; makers, same as No. 1.

No. 10. Improved patent coiling motion, for carding engines, drawing engines, &c.

No. 11. Patent improved self-acting balling machine.

No. 12. Screw gill-box, two-headed, one head of one delivery.

No. 13. Gill preparers, 1st, 2nd, and 3rd.

No. 14. Improved roving frame; makers, same as No. 1.

No. 15. Roving frame.

No. 16. Spinning frame.

No. 17. Improved spinning frame; makers, same as No. 1.

No. 18. Patent self-acting twiner.

Photographs of Power Looms; maker, Mr. George Hodgson, Bradford, Yorkshire.

No. 19. Plain No. 1 loom, 2 treads inside.

No. 20. Plain No. 1 loom.

No. 21. Plain loom, with shedding motion.

No. 22. Wide plain loom, 4 treads.

No. 23. Circular-box loom, 4 treads.

No. 24. Rocking-box loom, 4 treads.

No. 25. Plain loom, 5 shafts.

- No. 26. Drop-box loom, 8 treads, 3 boxes each side.
- No. 27. Drop-box loom, 3 boxes each side, with shedding motion.
- No. 28. Drop-box, 4 boxes each side, with 21-shaft shedding motion.
- No. 29. Circular-box loom, with shedding motion.
- No. 30. Circular-box loom, with shedding motion.
- No. 31. Loom for lastings and Serge de Berris ; old style.
- No. 32. Loom for lastings and Serge de Berris ; new style.
- No. 33. Power loom, with Yorkshire tuppets, for worsted goods.

B.—*Clothing.*

- No. 34. New patent self-acting automatic feeding machine.
- No. 35. Carding machine.
- No. 36. Improved single carding machine (2).
- No. 37. Improved single carding machine, with creel attached.
- No. 38. Improved double stripper ; double rubber condensing machine.
- No. 39. Improved slubbing machine ; intermediate and roving frames.
- No. 40. Patent self-acting woollen mule (front view) ; makers, same as No. 1.
- No. 41. Patent self-acting woollen mule (back view) ; makers, same as No. 1.
- No. 42. Spinning frame.
- No. 43. Plain loom for heavy tweeds ; 4 treads inside ; Mr. George Hodgson, maker.
- No. 44. Tatham's improved plain and flannel loom.

4.—CARDS.

No. 24. Five cards for woollen process ; these are combs made of leather, with fine wire teeth made of cast-steel.

No. 25. Five cards for worsted process, made of india-rubber foundation, with very fine cast-steel teeth. Used in the operation of carding, in the process of converting wool from the raw material into sliver.

These cards are fastened on to various cylinders, &c., of the carding machine, and the wool is passed through them, rendered in a fit condition for the further process of slubbing, gilling, roving, twisting, and spinning.

STATISTICS.

Statistics.

As showing the magnitude of the wool trade and manufacture in the United Kingdom, the following tables will be of interest, giving quantities of different classes of wool sold in the English markets, also the quantity and value of exports in the manufactured state.

LONDON SALES.

IMPORTS of Colonial Wools.—Quantities catalogued, London Sales, 1887.

	bales.
New South Wales.....	264,530
Victoria	308,900
Queensland	113,290
Tasmania.....	23,830
South Australia.....	89,050
Western Australia.....	18,170
New Zealand	280,050
Cape and Natal	170,550

Total—361,769,438 lb. (only 12 months). 1,268,370, or

Total Imports, 1887.

	bales.
Colonies	1,351,300
East Indies and Persia.....	124,000
Germany	9,600
Spain	6,700
Portugal	9,900
Russia	66,500
Sundry.....	190,000
Mohair, &c.	56,000

Grand total 1,814,000

THE LIVERPOOL SALES, 1887.

IMPORTS of Wool.

	bales.
East Indies.....	103,478
River Plate.....	1,794
West Coast wool (Africa)	36,865
Alpaca	32,366
Mediterranean	35,822
Portugal	9,910
Spain	751
Russia	2,115
Turkey.....	23,385
Mohair or goat's hair	32,329
Egypt	6,262
Africa	1,421
Colonies .....	.....
Sundries	1,357

Total 289,033

River Plate countries' wool—Estimated total clip,
1886-87 340,000

IMPORTS of Foreign and Colonial wool, alpaca, mohair, &c., into the United Kingdom, 1887.*

Imports.	Re-exported.	Home consumption.
lb.	lb.	lb.
550,752,000	280,951,366	269,800,664

* Eleven months only.

ESTIMATE of home-grown wool of the United Kingdom in 1886.

County, &c.		Fleece.	Weight—lb. per fleece.	lb.
1st Demi-lustre.	Lincoln	1,232,377	9½	11,707,581
	East Riding, Yorkshire..	438,343	8	3,506,744
	Nottingham	224,889	7½	1,686,667
	Leicester	322,635	7	2,258,445
	Warwick	296,031	7	2,072,217
	Kent.....	972,500	7	6,807,500
	Huntingdon	115,171	7	806,197
	Rutland	79,648	7	557,536
	Ireland	3,367,722	6	20,206,332
	2nd Demi-lustre.	Northampton	444,023	6¾	2,997,155
Oxford		295,031	6¾	1,991,459
Devon		858,513	7	6,009,591
Cornwall		435,358	7	3,047,506
Gloucester		385,576	7	2,699,032
Somerset		596,770	7	4,177,390
Hereford		306,177	5¾	1,760,517
Worcester		178,270	5¾	1,025,052
Stafford		249,905	5¾	1,436,953
Essex		342,029	4½	1,539,130
Surrey	87,858	4½	394,461	
Sussex	518,665	4½	2,333,992	
Wilts	647,519	4½	2,913,835	
Hants	507,450	4½	2,283,525	
Bedford	148,077	6	893,862	
Berkshire	261,616	6	1,569,696	
Buckingham	233,943	6	1,403,658	
Cambridge	274,268	6	1,645,608	
Herts	161,465	6	968,790	
Norfolk	568,584	6	3,411,504	
Shropshire	428,428	6	2,570,568	
Suffolk	438,986	5	2,169,930	
Middlesex	25,251	5	126,255	
Dorset	448,635	5	2,243,175	
West Riding, Yorkshire	629,446	6	3,776,676	
North Riding, Yorkshire..	611,447	6	3,668,682	
Northumberland	888,721	6	5,332,326	
Cumberland	472,606	6	2,835,636	
Westmoreland	325,932	6	1,955,592	
Durham	192,761	6	1,156,566	

ESTIMATE of home-grown Wool of the United Kingdom in 1886—*continued*.

Country, &c.	Fleece.	Weight lb. per fleece.	lb.
Derby	197,002	6	1,182,012
Lancaster	298,611	6	1,791,666
Cheshire	87,295	4½	392,827
Monmouth	178,626	4½	803,817
Wales	2,514,969	3½	8,802,391
Scotland	6,603,611	5	33,018,055
Total sheep and lambs, June, 1886	28,888,440		165,938,109
Total sheep and lambs, June, 1887	29,337,185		
Increase	448,745		
Lambs, 1887	11,158,154		
Less increase of sheep and lambs	448,745		
	10,709,409	3	32,128,227
Net clip of wool, 1887			133,809,882

NOTE.—The sheep and lambs of 1886 produce wool of 1887. The number slaughtered during the year is indicated by number of lambs, minus the aggregate increase of sheep and lambs. Thus—lambs, 1887, 11,158,154; increase of sheep and lambs, 448,745—10,709,409, which, at 3 lb. per fleece being the estimated loss of wool, gives 32,128,227 lb. The figures in above estimate are, as usual, exclusive of the Isle of Man and Channel Islands.

EXPORT of woollen and worsted yarns and goods from the United Kingdom,
(eleven months only), 1887.

Year.	Yarns—woollen and worsted.		Cloths, coatings, &c. — unmixed and mixed.		Flannels, blankets, and baizes.	
	lb.	£	yards.	£	yards.	£
1887	36,679,400	3,628,952	50,896,100	8,503,507	.....	825,320

Year.	Stuffs—mixed and unmixed.		Carpets and druggets.		All others.	Total value of yarns and goods.
	yards.	£	yards.	£	£	£
1887	181,149,900	6,710,015	11,778,100	1,186,837	1,406,193	22,206,824

SUPPLEMENT.

Supplement.

WOOLS shown at the Wool Competition, 4th to 31st January, 1889, in connection with the Centennial International Exhibition, Melbourne, 1888-9.

Competition for the International Grand Champion Prize for the most valuable six fleeces of fine merino wool, irrespective of age of sheep or growth of wool.

A.—Greasy Wool.

THE first prize was awarded to Messrs. Thomas Dowling and Sons, Jellalabad, Darlington, Western Victoria. The exhibit has been selected with the best judgment, and at once commands the attention of the interested visitor, who realizes that he is looking at something noble, and at one of the most perfect types of merino wool. I have handled wools from all nations, but must acknowledge that this exhibit is the best, taking everything into consideration. We have finer wools, wools that would spin higher counts, but not any that show to the same advantage in all respects—length, boldness, evenness, quality, elasticity, lustre, soft and silky touch, free from wasty noily tips, and rich condition, giving high results when combed. All these characteristics make the selection stand out prominently, and easily distance other competitors. The six fleeces (greasy) weigh 96 lb.—64 lb. being fleece, *valued at 12½d. per lb.; and 32 lb. being pieces, valued at 7d. per lb. These valuations created much comment. That of the fleece should have been a little higher, whilst the pieces were greatly overvalued, and 4d. per lb. would have been much nearer the true value. To confirm the latter valuation, several buyers and myself examined the pieces, each agreeing to write down his estimate. The highest price was 4½d., two going under the 4d.; so that the above valuation may be considered near the value.

87 F.

No. 1. This is a classic type of fine combing, which has an increasing demand, and was usually bought by the French; but lately the Bradford fine merino and cashmere manufacturers are buying by far the larger portion, and are outbidding all Continental buyers. The staple is fully 4 inches long, and when tested measures 4½ inches, showing great elasticity; is perfect in formation; stands out with much boldness and freedom; sound to the very tips, which are very small and black; the

* The values of wools in this competition are those given by the Judges.

fibres are faultless, pure, finely but distinctly serrated, of great elasticity, beautifully soft and silky; the lustre is all that can be wished for; condition desirable, with a rich healthy creamy yolk; perfectly free from any noily or wasty appearance; will give as little noil as is possible in wool-growing.

This one sample is most superb—the perfection of wool-growing—and places the breeders in the highest position, attainable only by science, sound judgment, and carefulness, assisted by suitable climate. Spinning quality, 120 s.; value, 13½d.*

88 F.

No. 2. This specimen shows a little more length, a shade lower than No. 1, displaying the same high class type; the staple is free, bold, and wavy, excellent in lustre, softness, silkiness, pliability, rich in yolk; slightly heavier than the first sample; little more noil; the distinction between the two is, however, very small. Spinning quality, 110 s.; value, 13d.

89 F.

No. 3. The similarity of this sample to No. 2 is very great, and scarcely recognizable, length, quality, softness, and lustre being equal; the fibre has a finer serration; condition trifle lighter. Spinning quality, 110s.; value, 13d.

90 F.

No. 4. A type of combing which, if it were not for the high quality, would be termed deep grown; although a long staple and very bold, is very fine, showing a white metallic lustrous silky wool, soft and elastic. The tips are pointed, heavy in yolk, and a little noily. Spinning quality, 110s.; value, 12¾d.

91 F.

No. 5. A long, silky, kind combing, with nice lengthy, close staple; black tipped; pure, sound, clear, and pliable; classed a sort lower. Spinning quality, 96s.; value, 12½d.

92 F.

No. 6. Useful combing which, although placed last in the first prize wools from Jellalabad, is a most desirable style; a healthy, well-grown, silky, free, sound sample; well proportioned, wavy staple, with small black tips and rich colour; is not of the same fineness; in excellent condition. Spinning quality, 90s.; value, 12d. per lb.

James Gibson, Esq., Bellevue, Tasmania, is placed second by a selection of the finest and most regular wools in this class. In comparison with other specimens, would be called “super or extra fine combing,” and distinctly shows the one extreme point of this very wide collection as exhibited in this class.

The six fleeces (greasy) weighed 92 lbs. in all, and were valued to within a fraction of 10d. per lb. Under valuation appears here again. The extra fine yarns this wool could be spun into do not seem to have been considered.

* Mr. Hawkesworth's valuations are given at the close of the remarks on each wool.

93 F.

No. 1. Superior ram's combing wool, which is not of the length and depth of the Jellalabad wool, but is much finer. The staple is of medium length (3 inches) of full, close, crimpy, soft, silky wool, being particularly clear, sound, high in lustre, very elastic, condition a little heavy, and possessing rich creamy appearance; used in making the finest cashmeres. Spinning quality, 140s.; value, 12d. per lb.

94 F.

No. 2. Equal in length, quality, density; has a finely serrated, pliable, soft, silky fibre; full bold staple, beautiful to handle; condition little heavy, with black yolky tips. Spinning quality, 140s.; value, 11½d. per lb.

95 F.

No. 3. Is a very free compact wavy stapled wool, carrying the usual lustre and density with that soft kind feel so noticeable in these samples. Spinning quality, 140s.; value, 11½d. per lb.

96 F.

No. 4. Very handsomely serrated wool, of great elasticity and almost metallic lustre; of great fineness, with density and nice condition; black tipped. Spinning quality, 140s.; value, 11½d.

97 F.

No. 5. The same small fine crimpy style as No. 2, differing in having a deeper and more faulty tip. Spinning quality, 140s.; value, 11½d. per lb.

98 F.

No. 6. Is a little longer and bolder than others in this exhibit; the staple is even, full all through, with much brightness; is free, sound, silky, evenly serrated, kind to the touch; little heavier yolky tips than others. Spinning quality, 140s.; value, 11½d. per lb.

Third order of merit in this section was awarded to ram's wool, 366 days' growth, over 1½ years old, which had gained first honours for the most valuable twelve fleeces. The sheep were bred by Messrs. Austin and Millear, Wanganella, Riverina, New South Wales. The six fleeces weighed 128 lb. (when skirted), which was valued at about 7½d. per lb. This exhibit caused considerable comment, the valuation being 4d. per lb. lower than the sale price in London, 6th December, 1888; also the great weight of individual fleeces, over 21 lb. each, the extra weight causing it to be placed in this prominent position. In comparing the second and third placed wools, we find the two extremes, the former being a very superior combing, the latter a long, sound, strong, deep-grown combing, which is a great paying wool, and finds a ready market. This type is a great favourite with manufacturers, and, would cultivate it myself if in suitable country; but I think it out of place in competing as a fine merino wool.

99 F.

No. 1. A deep, strong combing, of great length ($5\frac{1}{2}$ inches), with a very full wavy staple of soft pliable fibres, which are bright and sound; condition desirable; will give a little noil when combed. Spinning quality, 56s.; value, 10d. per lb.

100 F.

No. 2. This sample might be taken as an exact duplicate of No. 1; the same particulars apply.

101 F.

No. 3. Much longer than either Nos. 1 or 2, measuring $6\frac{1}{2}$ inches long, which is a great length for wool of 366 days' growth; as a deep-grown type, is most desirable; the staple is close, bold, wavy, bright, sound, pliable, with wasty noily tip; excellent in condition. Spinning quality, 56s.; value, 10d. per lb.

Next in order come two exhibits of rams' and ewes', which are most creditable collections, especially taking into consideration the very hard times experienced in that part of Queensland for about nine months; had this wool been produced under the same favourable conditions as most exhibits in this class, the first and second prize-takers would have had a most troublesome opponent from the ram selection. These sheep have a large proportion of Tasmanian blood, showing quality and style; are bred and were entered by Messrs. Marshall and Slade, Glengallen, Darling Downs, Queensland.

102 F.

No. 1. From stud ram, No. 164, son of the famous "King Billy"; fleece weighed 17 lb.; properly placed as a fine combing, of good length (4 inches), without testing, with kind soft touch; is free, sound, having excellently serrated silky fibre of great elasticity, so greatly appreciated by makers of high-class goods; condition rather heavy, with rich brown yolk; small black tips. Spinning quality, 130s.; value, $10\frac{1}{2}$ d.

103 F.

No. 2. Stud ram, No. 167, son of "King Billy"; weight of fleece, 14 lb.; fine combing, of useful length; equal to No. 1, with the same soft, silky, close, lustrous wool; slightly lighter in condition; tipped black. Spinning quality, 120s.; value, $12\frac{1}{2}$ d.

104 F.

No. 3. Stud ram, No. 495, son of "King Billy"; weight of fleece, 15 lb., showing the most perfect formation in this section; the staple is desirable in length ($4\frac{1}{4}$ inches), of great density and evenness from bottom to tip; full of that kind, silky, wavy, lustrous, elastic fibre, not very often found in Queensland, and rarely surpassed in more southern districts; will compare favourably with the foremost in this class as a most useful and desirable wool; in nice condition. Spinning quality, 120s.; value, $12\frac{1}{2}$ d.

104a F and 105 F.

Nos. 4 and 5. Superior combing, from stud ram under 1½ years old, evidently effected more from drought than the older rams; the wool is of great brightness, medium length (3½ inches), soft, free, silky, pliable; not quite so dense as others; same condition. Spinning quality, 120s.; value, 11d.

106 F.

No. 6. The shortest wool in the rams, and does not show to the same advantage as others; also, it is much lower in quality; not so dense, and heavy in condition. Spinning quality, 70s.; value, 8d. per lb.

107 F.

No. 7. Stud ewe, 2½ years old; a nice, bold combing, not showing the quality of the rams, but is properly classed as fine merino; the staple is sufficiently long for any worsted purposes; is full, close, lustrous, pliable, with dark noily tips; rather heavy in condition. Spinning quality, 66s.; value, 10d. per lb.

108 F.

No. 8. Four years old stud ewe; slightly shorter and thinner style of wool; equal in fineness, lighter in condition than No. 7; will not give so much noil or shrink. Spinning quality, 66s.; value, 11d. per lb.

109 F.

No. 9. Five years old stud ewe; combing, of useful length, quality, and density; is bright, and in fair condition. Spinning quality, 66s.; value, 10 per lb.

The Carngham wool is placed next, with six fleeces (rams'), weighing 88 lb. of deep-grown staple, bred by Hon. Phillip Russell. This exhibit shows very irregular in a fine merino class, ranging from a fine to a robust sort. The wool is of great character, and in excellent condition.

110 F.

No. 1. One of the finest of the Carngham selection; is of great length (5½ inches), of sound, pure, dense staple, having great lustre and pliability; beautifully serrated; will produce a great weight in sliver or top when combed, whilst the shrinkage in yolk or noil will be very light. Spinning quality, 90s.; value, 12½d. per lb.

111 F.

No. 2. Equal in length, of the same deep-grown, silky, lustrous style; staple strong, wavy, free, with small black tip. Spinning quality, 90s.; value, 12½d. per lb.

112 F.

No. 3. A sort lower than the two previous samples, also little heavier in condition, but loses none of that silky lustre and elasticity; so fully developed in these wools; will give a little noil. Spinning quality, 84s.; value, 11d. per lb.

113 F.

No. 4. A bold, strong, deep class; useful length of staple, which is close, silky, soft, bright, and in rich creamy condition. Spinning quality, 66s.; value, 10½d. per lb.

114 F.

No. 5. Combing, of great depth of staple, which, although not of the same fineness as others before noted, still retains all their soft bright qualifications; is a most desirable and paying wool. Spinning qualities, 70s.; value, 10d. per lb.

115 F.

No. 6. This specimen is out-classed as a fine wool, and does not show to advantage compared with the finer samples; is of the most robust type, thick haired, not so kind and pliable, but still has a lustrous, wavy staple, with wasty, noily tips. Spinning quality, 54s.; value, 9d.

116 F to 121 F.

The Collaroy Company (Limited), Merriwa, New South Wales, is represented by six samples of one of the most uniform selections exhibited, the same useful length, quality, and general character being very apparent. The staple is full, dense, free, bright, kind; carries much yolk, which is of a rich, healthy, cream colour; the sheep are very well bred, and in great favour with users; a most desirable and paying type. Spinning quality, 60s.; value, 10½d. per lb.

122 F to 124 F.

Following in rotation are three samples of rams' wool bred by MESSRS. G. Russell & Sons, Barunah Plains, Hesse, Victoria, which has the highest distinction in regard to value (16½d. per lb. in the grease). The condition is simply perfection, showing a silvery lustre and softness to which there is no equal in this class; is highly bred, and a type which is recognizable in all sections where competing. On this particular class there is a great demand, as the supply is not keeping up to the requirements of the trade. If got up in the same artistic manner as the Ercildoune or Mount Bute clips, we should probably see this brand, especially in the hoggets, realize fully as much per lb. as any wool that goes out of the Colonies. Weight of the six fleeces, 46½ lb. The selection is a most regular one; the particularizing of each specimen is unnecessary. The staple is of the most desirable length; is full, bold, dense, soft, silky, grandly serrated, very pliable; the prominence of these high qualities is rarely met with to such an extent as found in these samples; condition excellent, and, if it were not for the small black tips, might easily be taken for washed. Spinning quality, 120s.; value, 16½d. per lb.

125 F to 127 F.

The specimens of Messrs. J. L. Currie & Co., Lara, are from rams over 1½ years old, which obtained second order of merit in that class; are a little lower in quality, but a bold type; the staple is very full, close, and wavy, having great elasticity. Spinning quality, 90s.; value, 12d. per lb.

128 F to 130 F.

J. L. Currie, Esq., Titanga, Victoria, shows wool of great character, although not one of the deep-grown type. The staple is 4½ inches long, and is a perfect model in formation, being very full, dense, even from bottom to tips, which are very light and open, without being faulty; the fibre is fine, silky, kind, grandly serrated, of great pliability and perfection of condition; when combed will give the slightest possible noil. Spinning quality, 110s.; value, 14½d. per lb.

131 F to 133 F.

Four specimens, grown by Messrs. J. and G. Riddoch, at Weinteriga, on the Darling River, New South Wales, cut from station-bred ewes, purely grass-fed, are an excellent type of deep-grown Darling wool, showing effects of climate and country; is of a red cast; is a strong combing, with great depth of staple, full and bold; will give a little noil. This exhibit is shown to much greater disadvantage to most, it being straight from the pastures, and not in any way assisted by artificial feeding or housing. Is a most useful and creditable collection, but not a fine wool. Spinning quality, 60s.; value, 10½d. per lb.

134 F.

No. 4. From the same selection, is a very rough open-topped wool; will give much noil. Spinning quality, 56s.; value, 8½d. per lb.

135 F and 136 F.

Another well bred wool, from Murtoa, Victoria; owner, W. H. Bullivant, Esq., is of that light-conditioned style only to be grown in Victoria; of superior quality; of great kindness, small stapled, finely serrated, pliable, and of desirable condition. Spinning quality, 120s.; value, 13d. per lb.

142 F to 145 F.

Four samples from rams bred by Messrs. James & Gray, near Corowa, New South Wales, which show to great disadvantage in this class; are much shorter and thinner, also lacking density; have a small fine fibre, finely serrated, bright, rather heavy in condition; wasty tips. Spinning quality, 80s.; value, 10½d. per lb.

B.—*Washed Wool.*

The washed wools competing are very low down in the list, the first taking only 11th position. The showing of washed wool against greasy is considered by many to be an unequal test, as the one is in its

natural state, and the other has undergone a process required in preparing it for manufacturing purposes. The exhibits were most noble and beautiful to the eye, the workmanship in the getting up very artistic; and, in order to get colour, it will be seen that ewes' wool was selected.

137 F.

One sample from the celebrated Ercildoune flock, which is only valued at a fraction over 18d. per lb., not quite 2d. per lb. higher than the Barunah Plains greasy wool. This wool has a most imposing appearance; and although selected to give as great a weight as possible, it carries a lot of quality, combined with length, soundness, silky lustre, and density. The average per fleece was $6\frac{1}{4}$ lbs., which is a greater weight than that reached by some of the greasy fleece. Spinning quality, 100s.; value 18 $\frac{1}{2}$ d. per lb. The value seems small; but as I unrolled each fleece, skirted and arranged them for the Paris Exhibition of 1889, I had a good opportunity of thoroughly inspecting the collection. I found the skirtings rough and much discoloured, so that the real value as unskirted fleeces is about the value given by the judges.

138 F and 139 F.

The Mawallok, Victoria, exhibits (two), grown by W. Lewis, Esq., show a still higher quality; the wool is well-grown and lengthy; fibre is small, with great lustre, silkiness, and elasticity; is well got up, and handles full of nature. Spinning quality, 120s.; value, 24d. per lb.

140 F and 141 F.

The same owner's two samples, from Stoneleigh, Victoria; one of the superb class—evidently hoggets; excels as a lustrous, kind, silky, and well got up wool; in the perfection of condition. Spinning quality, 140s.; value, 32d. per lb.

Competition for the best and most valuable twelve fleeces, unskirted, from ewes over $1\frac{1}{2}$ years old, which have been previously shorn.

In the washed merino wool divisions there is a most magnificent show in quality, but not in quantity, and the get up is worthy of careful inspection. As usual in these classes, Sir Samuel Wilson takes the most prominent position, being represented from two stations—Ercildoune and Mount Bute. Even between the two there has been a keen competition, each taking first and second positions in the same classes. The get up is excellent, but several exhibits are equally good, but lightness of fleece puts them further down the list of "merit" in the competitions.

146 F.

For the best and most valuable twelve fleeces, unskirted, from ewes over $1\frac{1}{2}$ years old, which have been previously shorn, the first prize (probably Ercildoune) is represented by fleece and duplicate (the latter

is particularized). The growth, 372 days; weight (twelve fleeces), 168 lbs.; value, 21½d. per lb. The wool is a superior combing, and of high quality, long stapled, full and bold, finely serrated, of high lustre; handles soft and kind. Spinning quality, 100s.

147 F.

Second prize, 372 days' growth; weight, 61 lbs.; value, 20¼d. per lb.; is a fine combing, of great length; more lustrous than No. 146; is a little thinner in staple, which is very soft and pliable. Spinning quality, 90s.

148 F.

Third prize, bred by Hon. Phillip Russell, Carngham, Victoria; is 365 days' growth; weight, 61 lbs.; value, 19½d. per lb. This exhibit is of the same deep-grown type so favourably known as Carngham; is sound, strong, very clean; a little overwashed, which causes the wool to feel hard and unkind; a little more weight might have been left in to great advantage, which would have enhanced the value. Spinning quality, 60s.

Competition for the best and most valuable twelve fleeces, unskirted, from ewes under 1½ years old, which have been shorn as lambs.

149 F.

First prize. Again we find the Ereildoune blood to the front, this time through the assistance of weight. As a wool, placed in this honoured position in its class, is deficient in quality and get up—in fact, as a type, is inferior to either of the other placed selections. This sample shows brown, mushy, wasty, tips, not before seen from this station; the staple is lengthy, sound, inclined to be curly—the effects of over washing; feels unkind; will give much noil in combing; 377 days' growth; weight, 70 lb.; price, 18½d. This wool bears no comparison to any samples from either Ereildoune or Mount Bute, considering the price per lb., especially from so young a sheep; as a type is not to be compared to any other exhibit in this class. Spinning quality, 80s.

150 F.

The second prize was awarded; judging from the specimens from this station in the Museum, is from Mount Bute; it is a stylish, well-grown combing, of high quality, with sound, soft, silky, free, wavy staple, of great elasticity; will waste very little in combing; a most useful, desirable using class; 361 days' growth; weight, 55 lbs. Spinning quality, 100s.; value, 22d. per lb.

151 F.

The Mawallok exhibit is placed third, and is properly the highest valued per lb. (22d.); the washing of this wool is not excelled by any in this or any other class; is left beautifully soft to the touch; in the best of condition; is well grown; staple long, silky, sound, bold, dense, finely serrated, showing high lustre; a most valuable combing; 365 days' growth; weight of fleece, 55 lbs. Value, 2s. 4d. per lb.; spinning quality, 120s.

152 F.

Another specimen from Stoneleigh; is a very superior combing, of suitable length of staple; full, free, soft, silky, and lustrous. This sample is the only one from either Mawallok or Stoneleigh stations which shows any faulty tips, which are brown—probably the effects of dust after washing, as the wool is kind handling; 350 days' growth; weight, 50 lbs. Value, 2s. 3d.; spinning quality, 120s.

Washed Wools.

Competition for wool in bales, for the highest estimated value per pound, irrespective of weight of fleece.

A.—Ewes' Wool.

The washed wools in bales were most excellent in quality, if not in quantity. The prizes were given for the highest estimated value per lb., irrespective of the weight of fleece. These conditions attracted only a few from Victoria, who make a speciality in growing long, silky, fine combing, and washing in the most artistic and finished manner. To all interested in the wool trade these samples are undoubtedly of great interest, as the bulk of the clips (1888) from which these exhibits were selected were sold in the late February sales in London at very high prices. It is interesting to compare the valuation put on them by the Melbourne Jurors with the prices actually realized, and also to give as much information as possible in regard to the cause of the high prices paid by the European manufacturers. Some of the particulars are taken from the *Melbourne Age's* special London correspondent, dated 8th February:—"A very interesting feature of the wool-sales of this week has been the offering of some of the very choice Victorian fleece-washed clips—Ercildoune, Mount Bute, Stoneleigh, and Mawallok. For the very fine quality, soft, long wool the competition between the Bradford (Yorkshire) and French houses was extremely keen, although in most cases the English houses secured the choicest lots, at top rates. Herewith are the prices paid for similar descriptions in the first series of 1889:—Wilson (Mount Bute) 4s. 6½d. per lb.; Melbourne Jurors' valuation, 3s. per lb. Wilson (Ercildoune), 4s. 2½d. per lb.; Melbourne Jurors' valuation, 2s. 11½d. per lb. W. L. (Stoneleigh), 2s. 4d. per lb.; Melbourne Jurors' valuation (?). W. L. (Mawallok), 2s. 7¾d. per lb.; Melbourne Jurors' valuation (?). These last two brands were valued about the same in both cases. The first marks were superb wools as regards quality, condition and length. These are the essentials to secure such prices. As the supply of this class of wool is not increasing in proportion to the demand, there is every prospect of prices being maintained for a long time to come. The goods which are made from these long, fine, sound, silky wools being of a very expensive character, the first cost of the raw material is a matter of quite secondary importance, the chief anxiety of spinners and merino or cashmere manufacturers being to find suitable wool for their requirements. It is rather curious that, whereas at one time the French houses had practically the monopoly of the use of this class, of late years the Bradford manufacturers have

secured the bulk of it, to the detriment of the foreigners. The reason for the comparatively moderate ranges of prices for the latter types quoted is that the wool is rather broad-haired, or too short, or has been washed too thoroughly, so that it feels rather harsh. Giving the necessary quality and length, the grower can safely leave in a good proportion of yolk (as in the Wilson wool), the buyers preferring to have it in this condition. Further, the wool handles soft and silky with the nature left in, which enhances its value in the buyers' eyes.

153 F.

No. 1. First prize, from Mount Bute; a superb combing, of good length—1 $\frac{3}{4}$ inches; the staple is even and well formed, dense, very silky, soft, of silvery lustre, pliable, sound, and strong to the tips; the fibre is finely serrated, and washed in the most perfect style. Spinning quality, 140s.; value, 4s. 6 $\frac{1}{2}$ d. per lb.

154 F.

No. 2. Second prize, from Ereildoune; is little, if any, inferior to No. 1; shows a breed of wool of great character; very superior combing, lacking density as compared with No. 1. Spinning quality, 140s.; value, 4s. 2 $\frac{1}{2}$ d. per lb.

155 F.

No. 3. Third prize; exhibited by Messrs. Beggs Bros., Eurambeen, Victoria; is a most beautiful selection, and worthy of a better position; the wool is much longer, equally fine, having more density, combined with that silvery lustre, soft silkiness, elasticity, which is not surpassed by a higher-placed wool; as a combing wool it is excellent, both in length, strength, fineness, and condition; will give almost full weight in top. Spinning quality, 140s.; value, 4s. 3 $\frac{1}{2}$ d. per lb.

156 F.

No. 4. From Messrs. Bailey and Wynne, Terinullum, Victoria; combing, of good quality, but lacks the length required for high-class goods; has high quality, breeding, purity of fibre, lustre, pliability; is kind and silky, with condition of great excellence. Spinning quality, 120s.; value, 2s. 4d. per lb.

155a F.

No. 4. From Mr. Lewis', Stoneleigh; is not equal to the general standard of that breed, being shorter, more open, inclined to fuzziness, with wasty tip; is well got up, bright, and soft. Spinning quality, 90s.; value, 2s. 2d.

B.—Ewe Hoggets' Wool.

In the ewe hogget class the breeders are much in the same position as in the last class. The wool, as represented in the competition, grown on any station under ordinary circumstances, gives the highest returns (taking everything into consideration), both as regards manufacturing purposes and prices. Hoggets' produce invariably can be spun to a finer yarn than that from either ewe or wether of the same sort, having greater elasticity; it also is generally of a much better colour.

157 F.

No. 1. 1st prize, bred by Sir Samuel Wilson, probably at Mount Bute, is a most delicate looking wool of useful length (4 in.) ; in handling its high qualities are brought out more prominently. Comparison with the wool of this breed, which realized the extremely high price of 5s. 0½d. per lb. in 1886, is most favourable, it being longer, equal in quality, softness, silkiness, strength, lustre, serration, elasticity, and of more value per lb. than any sample so far particularized. The spinning capacity is not exceeded by wools grown in any other country, and it is as near perfection as wool can be grown and washed. Spinning quality, 190s ; value, 5s. 2d. per lb.

158 F.

No. 2. 2nd prize, evidently Ercildoune, represents a superb combing of nice length ; very lustrous, silky, free, sound, and soft, and in excellent condition. Spinning quality, 140s. ; value, 4s. 6d. per lb.

159 F.

No. 3. 3rd prize, bred and exhibited by the Hon. Robert Simson, Trawalla, Victoria. This is one of the wools known as thick-haired, and does not show to the same advantage as some that are not placed ; is of medium length, being a little open, with a rough, wasty tip ; is overwashed, causing a hard, unkind feel ; when combed, will waste much. Spinning quality, 70s. ; value, 2s. per lb.

160 F.

No. 4. The Carngham sample (Hon. Phillip Russell) is that deep-grown type so favourably known amongst users, although showing more yellow tip than usual from this station, still it is a most useful and valuable combing of great character, being lustrous, free, silky, soft, pliable, sound ; will give a little noil. Spinning quality, 100s. ; value, 2s. 7d. per lb.

*C.—Lambs' Wool.**Lambs' Wool (washed).***161 F.**

No. 1. The Hon. Phillip Russell, Carngham, Victoria, obtains 1st prize easily, there being a wide gap between even the placed lots. This exhibit shows more metallic lustre than in any other class ; it may be termed brilliant ; is very lofty, showy, handles beautifully, soft and silky ; is well-grown, with high quality, not having the least sign of those rough, hairy tips generally seen in lambs' wool ; washed perfectly ; is a most valuable, elegant, choice wool, and does great credit to both breeder and washer. Value, 38d. per lb.

162 F.

No. 2. From Ercildoune, 2nd prize ; is a very small, fine, silky, soft, and bright wool, in the best of condition. Value, 32½d. per lb.

163 F.

No. 3. 3rd prize, Mount Bute, is a fine, bulky, lustrous wool, inclined to openness ; in fine condition. Value, 29d. per lb.

164 F.

No. 4. From Mawallok ; is lustrous, soft, silky, with a nice, even wave all through, and desirable in condition. Value, 26d. per lb.

165 F.

No. 5. From Stoneleigh ; is a very lofty, bulky wool, showing much lustre, and in splendid condition. Value, 25d. per lb.

Scoured Wools.

(Excellence of scouring only taken into consideration).

167 F.

The scoured wools, in which excellence of scouring is regarded as the sole test of merit, brought together a very meagre collection—really only two competitors for merinos, the prize going to Messrs. Strachan, Murray, & Shannon, Clyde Works, Geelong, Victoria. These wools are scoured by Smith's new patent machine, which, as in latest machine patented by Messrs. M'Naught, of Lancashire, England, passes the wool along in a body, slowly and smoothly, by a number of forks, therefore preventing any tearing or ropiness, as seen by results. The whole works so gently that an entire fleece may be thoroughly scoured without any breaking up, and afterwards rolled as an ordinary greasy fleece. This sample of combing is beautifully clean and bright, having sufficient yolk left in, which leaves a soft, kind touch. The wool has been judiciously chosen for the purpose, evidently not having had any of that small, hard, black tip to contend with. Spinning quality, 70s. ; value, 21½d. per lb.

168 F.

The 2nd exhibit was scoured by Mr. G. F. Sugden, Toomwal, New South Wales ; although bold and lofty, does not compare favourably with the prize wool in brightness, since it handles hard, caused by the water having been too hot ; is a combing. Spinning quality, 70s. ; value, 20d. per lb.

Greasy Wools.

Competition for the most valuable twelve fleeces of rams' wool, unskirted, over 1½ years old, which have been previously shorn.

Rams' Wool.

In the class for rams over 1½ years, various types of merino are represented, several of which are so excellent that they are also entered in the Grand Champion Class. Messrs. Austin & Millear, Wanganella, New South Wales, take first place, from which six fleeces are selected, and gain fourth honours in the Champion wool competition. Messrs. Currie & Co., Lara, Victoria, gain second position, and also enter the six picked fleeces in the Champion competition. As these wools are particularized in the higher class, no further mention is made in this class.

169 F.

No. 1. Awarded third prize, from Collaroy, Merriwa, New South Wales, 370 days' growth ; is a long, sound, useful combing, with white, clear, pure silky fibre, evenly serrated, pliable, rather heavy in condition, with fatty, soft black tips. Spinning quality, 60s. ; value, 9d. per lb.

170 F.

No. 2. From same station ; slightly longer ; is strong and free, with wavy elastic staple and small black tips ; condition heavy. Spinning quality, 60s. ; value, 9d. per lb.

171 F.

No. 3. Strong, deep-grown combing, also from Collaroy ; is of good length, lower in quality ; will waste much ; very heavy in rich brown yolk. Spinning quality, 56s. ; value, 7½d. per lb.

George Goulter, Esq., Hawkesbury, Blenheim, New Zealand, is represented by three excellent samples of 340 days' growth :—

172 F.

No. 1. A superior wool, 2½ inches long ; will comb, but is better adapted for the hosiery trade, being a soft, bulky, light style ; is sound, bright, finely serrated, rich in yolk, with small black tips. Will spin to 80s. ; value, 11d. per lb.

173 F.

No. 2. Very similar to No. 1 ; same particulars apply.

174 F.

No. 3. A dense, broad-stapled wool ; sound, free, lustrous, with nice even crimp ; tips little noily. Spinning quality, 80s. ; value, 10½d. per lb.

The Hon. Phillip Russell, Carngham, Victoria, follows with three specimens of useful combing, which shows a distinctly different type of wool ; 367 days' growth :—

175 F.

No. 1. A long, silky, strong combing, of nice quality and condition ; the staple is close, sound, wavy, free, pliable, with high lustre ; will yield good weight in "top." Spinning quality, 64s. ; value, 11½d. per lb.

176 F.

No. 2. Deep, strong combing ; staple of nice length, dense and bright ; fibre very clear, pure, beautifully serrated ; in good condition, with small fine black tips. Spinning quality, 64s. ; value, 11½d. per lb.

177 F.

No. 3. Combing, in lighter condition ; little shorter, with a broader fibre ; not so dense ; is particularly bright, sound ; has slight wasty tip, which will give a little noil. Spinning quality, 60s. ; value, 10½d. per lb.

Donald Gunn, Esq., Pikedale, Darling Downs, Queensland, exhibits a type of wool (340 days' growth), from descendants of pure Negretti breed, which at one time did great service in Australian flocks, by infusing great density and fineness. This class is fast disappearing. The collection is very creditable, especially taking into consideration the very trying times experienced on the Darling Downs from drought.

178 F.

No. 1. Pure clothing wool, greatly appreciated by manufacturers of superfine cloths in the West of England; is very short, fine, dense, finely serrated; in good condition. Value, 10d. per lb.

179 F.

No. 2. Little bolder in staple; equal in fineness, density, and condition. Value, 10d. per lb.

180 F.

No. 3. More of a light, open wool; is soft, kind to handle, and although a little lower in quality, the condition makes it of the same value—10d. per lb.

R. D. McLean, Esq., Hawke's Bay, New Zealand, exhibits wool of 363 days' growth:—

181 F.

No. 1. Is a long, fine combing, lacking density; decidedly stringy; the staple is sound, wavy, soft, silky; in light condition. Spinning quality, 70s.; value, 9½d. per lb.

182 F.

No. 2. Much shorter and heavier in condition, with mushy, wasty tips. Spinning quality, 60s.; value, 8d. per lb.

The Hon. J. Balfour, Round Hill, Albury, New South Wales, has three very attractive specimens of 364 days' growth:—

183 F.

No. 1. Combing; long, silky, soft, lustrous, with dense wavy staple of great pliability; in excellent condition; a most desirable style of wool. Spinning quality, 90s.; value, 12d. per lb.

184 F.

No. 2. Long, wavy, light conditioned combing; kind, pliable; not so dense as No. 1. Spinning quality, 90s.; value, 12d. per lb.

185 F.

No. 3. Silky, lengthy, sound, free combing; silvery lustre; finely serrated; very elastic, kind; will produce good weight in "top." Spinning quality, 90s.; value, 12d.

L. McDonald, Esq., Wallabadah, New South Wales, has three samples of 371 days' growth:—

186 F.

No. 1. A hosiery wool; kind to handle; loose, but fine and pliable. Value, 8d. per lb.

187 F.

No. 2. Medium in length; light conditioned, soft, bright wool. Value, 8d. per lb.

188 F.

No. 3. Much longer, but thin stapled; in rich, creamy condition. Value, 8d. per lb.

J. A. Scott, Esq., Bogamildi, Warialda, New South Wales, has two specimens of 340 days' growth:—

189 F.

No. 1. Short, light, lustrous wool; kind, little open, wasty tip. Value, 8d. per lb.

190 F.

No. 2. Combing; heavy in condition; is sound, soft, with open, noily tip. Spinning quality, 70s.; value, 8d. per lb.

Competition for the most valuable twelve fleeces of rams' wool, unskirted, under $1\frac{1}{2}$ years old, which have been previously shorn.

In the class for rams under $1\frac{1}{2}$ years, the specimens are of the most useful type as a paying produce; is a very regular collection throughout. The first order of merit is awarded to the Collaroy Co., Merriwa, New South Wales, represented by three samples, 357 days' growth:—

191 F.

No. 1. A deep grown combing, with long, sound, dense, staple; very kind and pliable, heavy in rich brown yolk, and black tips; will shrink much. Spinning quality, 64s.; value, 11d. per lb.

192 F.

No. 2. Little thinner in staple; is sound, bright, elastic, strong, nice length, and yolk. Spinning quality, 64s.; value, 11d. per lb.

193 F.

No. 3. A bold, sound, healthy combing; close, bright, and heavy. Spinning quality, 64s.; value, 10d. per lb.

Messrs. Austin and Millear, Wanganella, New South Wales, have three exhibits, 365 days' growth :—

194 F.

No. 1. Long combing, with great depth of staple of nice lustrous wool; wavy, sound, free; condition desirable. Spinning quality, 64s.; value, 11½d. per lb.

195 F.

No. 2. Similar to No. 1; same particulars apply.

196 F.

No. 3. Represents an extra deep grown combing; long, close, sound, free; trifle thick haired; heavy in condition. Spinning quality, 54s.; value, 8d. per lb.

R. D. McLean, Hawke's Bay, New Zealand; four samples, which are a great improvement on the wools from the same station in previous class :—

197 F.

No. 1. A super combing, of good length; staple is full, soft, silky, kind to handle, and lustrous; in beautiful condition; will give a little noil. Spinning quality, 70s.; value, 11d. per lb.

198 F.

No. 2. Light conditioned combing, with small black tip; bright, even stapled. Spinning quality, 70s.; value, 11d. per lb.

199 F.

No. 3. Dense, bold, free combing, of good length; staple full, soft, and silky, kind to handle, lustrous, and in splendid condition; will give a little noil. Spinning quality, 64s.; value, 10½d. per lb.

200 F.

No. 4. Differing only in having a heavier wasting tip. Spinning quality, 64s.; value, 10½d. per lb.

200a F.

A. Sloane, Esq., Mulwala, Riverina, New South Wales (only exhibit); is of great character; combing, of good length with quality; is a dense, lustrous, and silky wool; tips are a little earthy, will also give a little noil. Spinning quality, 60s.; value, 10d. per lb.

Competition for the best and most valuable twelve fleeces, unskirted, from ewes over 1½ years old, which have been previously shorn.

For the best and most valuable twelve fleeces, unskirted, from ewes over 1½ years old. This class, for cutting the most valuable fleeces, contained most interesting and numerous collection from the principal

Colonies, representing that type of wool termed useful and profitable, *i.e.*, a great weight of fleece per sheep, at a medium price. These exhibits are grown in many varied climates, and in almost every condition under which sheep farming is carried on in these Colonies.

Collaroy Company again takes first position; represented by five samples, 365 days' growth. These wools have been so evenly selected, that it would be a waste of time to make a distinction in a manufacturing point of view:—

201 F, 202 F, 203 F, and 204 F.

Nos. 1, 2, 3, and 4. Well grown desirable combing sort, of good lengthy wavy staple, full, dense, bright, and pliable; very soft to handle; in good condition; will give a little noil. Spinning quality, 64s.; value, 11d. per lb.

205 F.

No. 5. Gives a much lower quality; is equally well bred and grown, but having a rough wasty tip. Spinning quality, 52s.; value, 8d. per lb.

The Wanganella three samples, 365 days' growth, are exactly the same as the first prize takers, so that the contest is full of merit; the fleeces weigh heavier than the Collaroy, and are valued at much less per lb., but the latter is most difficult to make out, as the wool is equally fine, besides being in much lighter condition:—

208 F.

No. 1. A most useful well bred, sound, deep grown combing, and showing more quality than any previous specimen from this station; the staple is even, well proportioned throughout, kind, lustrous, nicely serrated, dense and pliable, and in excellent condition. Spinning quality, 66s.; price, 12½d. per lb.

209 F and 210 F.

Nos. 2 and 3. Lengthy strong stapled sample, little thinner; bright, soft, and in a desirable healthy condition, with small black tips. Spinning quality, 60s.; value, 11½d.

Messrs. J. L. Currie & Co., Lara, Victoria, placed third by a most attractive stylish well bred wool, 364 days' growth. This class of combing is a great favourite with the users, a type that has placed Western Victoria in the most favoured position. This wool has the distinction of having the highest value per lb. in this class, which is only 2d. per lb. less than the washed Grand Champion entry from Ercildoune:—

206 F.

No. 1. Is of great length of staple, very close, well proportioned, showy, kind, silky, and lustrous wool; the fibre is pure, sound, grandly serrated, and elastic; condition perfect; will give full weight in top. Spinning quality, 90s.; value, 15½ per lb.

207 F.

No. 2. Of the same high-class type, having broader seriation.

New Zealand is represented by C. Goulter, Esq., Hawkesbury, with two specimens of 345 days' growth:—

211 F.

No. 1. Superior combing, of good length, evidently having a dash of Tasmanian; the wool is fine, soft, silky, and bright; rich in yolk, with small black tips. Spinning quality, 90s.; value, 11d. per lb.

212 F.

No. 2. Is a great contrast to No. 1; is decidedly a strong, deep-grown combing, with unusually long staple, close, full, and bold. Spinning quality, 56s.; value, 8½d. per lb.

A. Beaumont, Esq., Marengo, New South Wales, four specimens; 374 days' growth:—

225 F.

No. 1. Combing, of medium length, of soft, fine, silky, bright wool; in light condition, with open, noily tips. Spinning quality, 90s.; value, 10½d. per lb.

226 F, 227 F, and 228 F.

Nos. 2, 3, and 4. Are much deeper grown; light in condition, with noily, open, earthy tips. Spinning quality, 60s.; value, 7½d. per lb.

Donald Gunn, Esq., Pikedale, Darling Downs, Queensland, two samples; 310 days' growth:—

229 F.

Are a decided improvement to the rams' wool from same station; they look more healthy, have a more inviting appearance; is a fine clothing, very small and fine; not so open as the rams', with a kind touch, very pliable, rich, and heavy in yolk; in comparison with the Saxony (Negretti) samples, it does not suffer in the least; although equally fine, is a bolder growth. Value, 9d. per lb.

230 F.

No. 2. A much longer wool, which would card, and could be used in hosiery goods; the staple is close, full, and beautifully fine. Value, 9½d. per lb.

230a F.

G. J. Mulholland, Esq., Oura, Wagga Wagga, New South Wales:—One specimen of very fine wool, thin in staple, light in condition. I have seen much better wool from this station. Spinning quality, 80s.; value, 9½d. per lb.

213 F.

J. Riddoch, Esq., Yallum Park, Penola, South Australia, is represented by three samples of useful, high-bred wool, of great character;

367 days' growth. As a manufacturers' wool, is very desirable—a sort they rejoice to see; a style that is surpassed by only a few in any class. The valuation, at 10d., is much under the real worth:—

No. 1. A long (5 inches) stapled combing, full, bold, and dense; fibre is fine, clear, sound, perfectly serrated, of great pliability; lustre undeniable; has a kind, soft touch; in excellent condition, having a light, open, black tip; if washed, would compete with most of the high-priced brands. Spinning quality, 90s.; value, 13d. per lb.

214 F.

No. 2. A kind, long ($4\frac{1}{2}$ inches), light-conditioned, bright combing, soft, and very elastic; is clear, sound, with kind, crimped fibre; in splendid condition; would make a grand, healthy-looking top. Spinning quality, 90s.; value, 13d. per lb.

215 F.

No. 3. Full, bold, bulky stapled, dense wool, with broad serration, kind, and silky, and in best of condition. Spinning quality, 90s.; value, 13d. per lb.

247 F and 248 F.

C. W. Simson, Esq., Mungadel, Hay, New South Wales, two exhibits; 371 days' growth:—Are of that desirable deep-grown paying type, much in request by manufacturers of worsted. The two samples are so much alike that one description is only required; is a well-bred wool, of great length (5 inches), distinctly serrated; has a very close and well-proportioned staple, full of lustrous, fine, kind, silky, fibre, very elastic, having a slight red tinge—effect of colour of soil; it is so light and loose that it will not affect the brightness when scoured; tips are open and noily. Spinning quality, 60s.; value, 9 $\frac{1}{2}$ d. per lb.;

A. Busby, Esq., Cassilis, New South Wales, four samples; 370 days' growth:—

216 F.

No. 1. Fine, useful, well-grown wool; staple long, dense, free, sound, bright, pliable, and deeply serrated; healthy in condition; black tipped. Spinning quality, 66s.; value, 10d. per lb.

217 F.

No. 2. Bold, full-stapled combing; bright, finely serrated, having open, noily tips; in nice condition. Spinning quality, 90s.; value, 9d. per lb.

218 F.

No. 3. Shorter growth than No. 2; is thin in staple, fair quality, and heavy in condition; will waste heavily in scouring and combing. Spinning quality, 56s.; value, 8d. per lb.

219 F.

No. 4. Long, crimpy wool; pliable, bright, thin, and pointed tips, which will give much noil; heavy in condition. Spinning quality, 56s.; value, 8d.

Messrs. Loughlin & Co., Welltown, Goondiwindi, Queensland; 369 days' growth. (These wools have been grown during a nine months' drought) :

220 F.

No. 1. Is a nice, light conditioned, bright, dense wool, with staple of medium length, soft, pliable; a useful hosiery wool: Spinning quality, 70s.; value, 10½d. per lb.

221 F.

No. 2. Little shorter than No. 1; bright, hard, harsh touch, with open, woolly tips, giving much noil. Spinning quality, 60s.; value, 8½d. per lb.

222 F.

No. 3. A light, lustrous, hosiery wool, of medium length; is bold, full, tips open and wasty. Spinning quality, 60s.; value, 9½d. per lb.

Messrs. R. Campbell & Son, Otekaiki, Oamaru, New Zealand, two samples; 265 days' growth :

223 F.

No. 1. A very bright, lustrous, lengthy combing; dense, with good quality; fibre clear, pure, sound, beautifully serrated and elastic; in rich condition; black tipped; is a well bred, attractive, useful exhibit. Spinning quality, 70s., value, 11½d. per lb.

224 F.

No. 2. Not so long, staple full, close, even throughout, kind, soft, pliable; condition little heavy, with black tips. Spinning quality, 70s.; value, 10¾d. per lb.

Competition for the best and most valuable twelve fleeces, unskirted, from ewes under 1½ years old, which have been previously shorn.

The competition in this section is not so numerously patronized as might have been expected. According to conditions of Schedule, H. Gatenby, Esq., Rhodes, Longford, Tasmania, takes first prize. When the awards were first issued these wools were not mentioned as placed, but upon a reconsideration the mistake was rectified and the card with first order of merit placed in the case. The three specimens (362 days' growth) are so uniform that one description will apply to all. The wool is of medium length, of great density; is soft, kind, with superb quality, equal to any of the fine Saxony combing; it would be impossible to grow a finer fibred wool; is perfectly serrated, having great elasticity; is of a silvery lustrous silky type; rich and healthy condition, with smallest of black tips. Spinning quality, 190s.; value, 15d. per lb.

The Wanganella young ewes (three samples, 362 days' growth) secures a prize :—

234 F.

No. 1. Shows more quality than any other exhibit of this breed ; is very long stapled, dense, bright, pliable, finely serrated, free, sound throughout, splendid condition, small black tips. Spinning quality, 66s. ; value, 11½d. per lb.

235 F.

No. 2. Is much deeper grown, broad combing ; full, bold, wavy staple of lustrous kind wool ; little noily tips ; excellent condition. Spinning quality, 60s. ; value, 10½d. per lb.

236 F.

No. 3. Combing, deeply grown, kind, pliable, noily tips ; good condition. Spinning quality, 60s. ; value, 10½d. per lb.

Carngham again obtains a place with wool (376 days' growth) of the usual stylish showy character :—

237 F.

No. 1. Very long dense stapled wool of useful quality ; the fibre is clear, bright, sound, beautifully serrated, sound, tips a little noily ; condition not to be improved. Spinning quality, 60s. ; value, 12½d. per lb.

238 F.

No. 2. Of the usual long fine silky style ; staple strong, free, wavy, and pliable ; great lustre. Spinning quality, 60s. ; value, 12½d. per lb.

239 F.

No. 3. Similar type, with small pointed wasty staple ; will waste a little when combed. Spinning quality, 60s. ; value, 11¾d. per lb.

The Hon. J. Balfour, Round Hill, Albury, New South Wales, has two specimens ; 345 days' growth :—

240 F.

No. 1. Is a very light-conditioned showy wool ; long, fine, silky, wavy staple ; lustrous, sound, free ; will shrink a little when scoured or combed. Spinning quality, 70s. ; value, 13d. per lb.

241 F.

No. 2. No way inferior to No. 1. Spinning quality, 70s. ; value, 13d. per lb.

Collaroy Co., three samples, from young ewes; 355 days' growth, showing a falling off; the wool, although well grown, is thinner and lighter:—

242 F.

No. 1. A lengthy combing; sound, free, bright, and pliable; rich in creamy yolk. Spinning quality, 64s.; value, 11d. per lb.

243 F.

No. 2. Long combing; lacks density; lustrous, kind, nice condition; rough, open, noily tip. Spinning quality, 60s.; value, 9½d. per lb.

244 F.

No. 3. Deep grown combing; bright, healthy, rich condition. Spinning quality, 60s.; value, 9½d.

J. C. Manchec, Esq., Glen Moan, Willow Tree, New South Wales, two exhibits; 360 days' growth:—

245 F.

No. 1. Small light hosiery wool; fine, lustrous, soft, pliable; desirable condition; would comb to 70s. Value, 10½d. per lb.

246 F.

No. 2. Thin, shelly sample; soft, bright; heavy in condition. Spinning quality, 60s.; value, 8d. per lb.

W. H. Bullivant, Esq., Longerenong, Murtoa, Victoria, two samples:—

247a F.

No. 1. A fine soft silky combing, in light condition; very lustrous; serration fine and elastic; will yield a little noil. Spinning quality, 74s.; value, 12d. per lb.

248a F.

No. 2. Much deeper grown combing; long, silky, wavy staple; dense, sound, wasty tips. Spinning quality, 66s.; value, 12d.

Messrs. J. L. Currie & Co., Lara, Victoria, two specimens of extremely attractive, high-bred, light-conditioned wool:—

249 F.

No. 1. Very long, fine, sound combing; lustrous, showy, soft, finely serrated, and pliable; the fibre is clear, pure all through, giving the slightest noil possible. Spinning quality, 74s.; value, 12½d. per lb.

250 F.

No. 2. A well grown combing, with long, silvery, lustrous, wavy staple; is very full and dense; clear, sound, strong fibre; not in the least noily; will give full weight in "top." Spinning quality, 70s.; value, 12½d. per lb.

Competition for wool in bales, for the highest estimated value per pound, irrespective of weight of fleece.

A.—Ewes.

This section is for the highest value per lb., independent of number of fleeces. Are mostly skirted and prepared for sale, and may be said to thoroughly represent the average value of each clip, and, for the first time, every Australian Colony is in competition. The collection is miscellaneous, consisting of wools suited in any capacity, from high class cashmeres and merino dress goods to low woollens. Is very instructive to anyone not knowing the kind of wool used for making the different class of goods. The highest honour is awarded to the Hon. Phillip Russell, Carngham, Victoria, valued at 15½ per lb.

251 F.

No. 1. One of those long, silky, dense, sound, free, soft, and elastic combings, only grown in Victoria, which seems to be a speciality amongst a few highly improved flocks, which is not produced in any other part of the world. The wool is perfectly free from waste or noily substance; the only shrinkage would be in washing, and that extremely slight; will give full weight in sliver; in point of quality is by far the highest from Carngham; used in making cashmere dress goods. Spinning quality, 80s.

252 F.

No. 2. This is a bolder formation; the staple is full, close, wavy, lustrous, pliable; perfect tips; light in condition. Spinning quality, 80s.

Messrs. J. L. Currie & Co., Lara, Victoria, two samples:—

253 F.

No. 1. A very pleasing wool to examine. The staple is beautifully formed, being dense, even from bottom to tip; lustre more perfect than the above mentioned, having that metallic appearance so greatly appreciated; very sound, free, pure; condition satisfactory; will give a little noil; used in making cashmere dress goods. Spinning quality, 76s.; value, 14½d. per lb.

254 F.

No. 2. Similar to No. 1, differing only in having a large wasty tip; used in cashmeres and merino dress goods. Spinning quality, 76s.; value, 14½d. per lb.

Jas. Gibson, Esq., Bellevue, Tasmania, two samples. Placed third. Are a very different style of wool, displaying more quality, at the same time is much shorter and full of yolk:—

255 F.

No. 1. Superb wool, of great density and evenness; is free, sound, bright, pliable, with rather wasty tip; condition heavy, which has effected the value; if spun for combing would make 120s.; better adapted for high class hosiery goods. Value, 13¼d. per lb.

256 F.

No. 2. Particulars as above apply.

W. H. Davidson, Esq., Elphinstone, Victoria, two samples:—

257 F.

No. 1. Choice, excellent, fine combing, of useful length; bold, beautifully serrated, and proportioned staple; bright, sound, free, silky; will give full weight in sliver; nice rich healthy condition. Used for cashmeres. Spinning quality, 100s.; value, 13½d. per lb.

258 F.

No. 2. Little longer, with fine, silky, crimped staple; strong, free, showy wool; in the best of condition; used for cashmeres. Spinning quality, 100s.; value, 13½d. per lb.

Thomas Russell, Esq., Warook, Victoria, two samples:—

259 G.

No. 1. Fine medium-grown combing, of great brightness; is free, kind, silky, finely serrated, very elastic; condition everything that could be wished for; used for cashmeres. Spinning quality, 100s.; value, 13d. per lb.

260 F.

No. 2. Much longer type; dense, wavy, staple; free, lustrous; condition light, with open, noily, tips; used for cashmeres. Spinning quality, 96s.; value, 12d. per lb.

Two specimens from the Readlands, Tasmania:—

261 F.

No. 1. Much deeper-grown type than is generally grown in that Colony. Fine, silky, lengthy, combing; very clear, sound, free, rich, creamy, healthy condition, with small black tips. Spinning quality, 76s.; value, 11½d. per lb.

262 F.

No. 2. Little lower in quality, greater depth of staple, heavy in condition; used for merino dress goods. Spinning quality, 70s.; value, 10¾d. per lb.

Sir W. J. Clarke, Cobran, Riverina, New South Wales, three specimens:—

263 F.

No. 1. Very desirable, useful wool, of medium length of staple, which is very close, full, and wavy; is bright, soft, pliable, having open, wasty, tips; condition good; used for hosiery goods. Value, 11d. per lb.

264 F.

No. 2. Very long, deep-grown combing; lustrous, soft, silky; is full, close, wavy, very elastic; tips open and wasty; condition excellent; used for merino dress goods. Spinning quality, 66s.; value, 11¾d. per lb.

265 F.

No. 3. Similar to last specimen ; will give a little more noil. Spinning quality, 66s. ; value, 11½d. per lb.

266 F.

S. H. Collan, Esq., Hawke's Bay, New Zealand :—One sample of light, silky, soft, kind wool ; very full, dense ; a particularly handsome hosiery wool ; in excellent condition. Value, 11½d. per lb.

267 F.

C. W. Simson, Esq., Mungadal, Hay, New South Wales :—A deeply-grown, strong, combing, showing good breeding ; in good condition, having a light red, earthy, tinge ; used for worsted purposes. *i.e.*, dress goods, coatings, soft hosiery yarns. Spinning quality, 60s. ; value, 10d. per lb.

268 F.

J. Riddoch, Esq., Yallum Park, South Australia :—A most desirable, useful, dense, silky, combing, of good quality ; is bright, sound, free ; excellent condition ; small, black, open tips ; used for merino dress goods. Spinning quality, 66s. ; value, 12d. per lb.

Messrs. Cox Brothers, Rawdon, Rylstone, New South Wales ; two samples :—

269 F.

No. 1. Small, short, soft, bright, wool ; used in the hosiery trade ; very fine, delicate fibre ; not so dense as most exhibits ; rich in yolk, with small black tips. Value, 11d. per lb.

270 F.

No. 2. Little loftier, with more density ; is soft, kind ; a desirable hosiery wool. Value, 11¼d. per lb.

The Hon. J. Balfour, Round Hill, Albury, New South Wales ; two specimens :—

271 F.

No. 1. Combing, of medium length ; rather thin in staple, which is evenly serrated ; bright, soft ; in nice condition ; used for merino goods. Spinning quality, 70s. ; value, 12d. per lb.

272 F.

No. 2. Much deeper-grown ; is lustrous, clear, strong ; open, wasty, noily tips ; condition desirable. Spinning quality, 60s. ; value, 11¼d. per lb.

R. Samuelson, Esq., Darlington, Victoria, two specimens :—

273 F.

No. 1. Very attractive, showy, well bred, lengthy combing; the lustre is not surpassed in this section; staple silky, dense, bold, well-proportioned, round; condition perfect; this one specimen is equal to any that has gained honours; suitable for cashmeres. Spinning quality, 80s.; value, 15½d. per lb.

274 F.

No. 2. Although a fine silky wool, of nice length, is not so dense; will give more noil, also slightly heavier in condition; used for merino dress goods. Spinning quality, 76s.; value, 13½d. per lb.

Sir J. Hall, Canterbury, New Zealand, two samples :—

275 F and 276 F.

These are similar; rather short, with a thin, stringy, staple, lacking density; has fine, delicate, small fibre; is lustrous, heavy-conditioned hosiery wool. Value, 10½d. per lb.

277 F and 278 F.

W. M. McFarland, Esq., Canterbury, New Zealand, two samples :— Well grown, lengthy, free stapled, bright, strong, with good quality; heavy in condition, with black, wasty tips; used in the worsted trade. Spinning quality, 60s.; value, 10d. per lb.

279 F.

The Lansdowne Pastoral Co., Tambo, Queensland, three specimens. These have attracted considerable attention; they are all well-grown; of fair quality; are very dry, having a slight earthiness in the tips, which is common in almost all wools grown in Western Queensland :—

279 F.

No. 1. Very deep, long, wavy combing, resembling the Collaroy type very much; is bright, strong, dense; will yield much noil; used for worsted goods. Spinning quality, 60s.; value, 10d. per lb.

280 F.

No. 2. Much shorter; is a soft, kind, bright, hosiery wool, with good quality; open, mushy tips. Value, 10½d. per lb.

281 F.

No. 3. Little longer; fine, dense, soft; will make a bulky, bold, yarn for hosiery. Value, 10d. per lb.

282 F and 283 F.

Brand AB, supposed to be from Darling Downs, Queensland; two samples :—Very fine, short, lofty wool; heavy in condition; black tipped; hosiery wool. Value, 9d. per lb.

284 F and 285 F.

Brand AA, two samples, from same district:—Very short, fine, heavy-conditioned wool; used in the cloth and flannel trade. Value, 8½d. per lb.

286 F and 287 F.

Brand AII:—Short, small, fine, soft, wool; very heavy in yolk; used in the woollen trade. Value, 8d. per lb.

288 F and 289 F.

Western Australia is for the first time in competition; it is represented by Messrs. E. & T. Wintenoom, from their White Peak Station, Geraldton, Champion Bay; two samples:—350 days' growth; valued at 8d. per lb.; is a useful wool, of nice quality, having a dark blue tinge resembling produce from the Border of South Australia. The staple is of medium length, thin, lacking density; the fibre is extremely small, is sound, bright, soft, with heavy mushy, wasty tip; will give much noil; used for hosiery goods. This wool might be improved by crossing, for length; the fineness is all that is necessary for that country; Canowie, Bungaree, or Murray Vale rams are most suitable.

*B.—Ewe Hoggets.***290 F and 291 F.**

G. W. Keach, Esq., Chiswick, Tasmania, takes first prize, but practically there was no competition. The wool is of high quality and breeding, with good length—longer than we usually find from that Colony; very even and dense; fibre is clear; sound, silvery lustre; finely serrated, elastic; in splendid condition. Spinning quality, 90s.; value, 13d. per lb.

C.—Lambs.

For greasy lambs' wool the competition was very keen, if not extensive, the highest value per lb. being the object:—

292 F.

No. 1. W. H. Davidson, Esq., Coliban Park, Elphinstone, Victoria, receives first award, with a small, fine, soft, lustrous specimen; shows a little coarseness in tips; in good condition. Value, 15d. per lb.

293 F.

No. 2. Messrs J. L. Currie & Co., Lara, Victoria; is of high quality; has a full, short, crimped staple; very bright, kind, and showy, even nice tip, desirable condition, and compares favourably with the first award in point of quality. Value, 14½d. per lb.

294 F.

No. 3. R. Jamieson, Esq., Darlington; of the very fine, small, wavy stapled class, showing more lustre than either of the others mentioned; is soft, silky; a most excellent wool. Value, 14½d. per lb.

294a. F.

No. 4. Thomas Russell, Esq., Warook, Victoria, exhibits a delightful specimen; little bolder growth than former samples; equal in softness; staple dense, silvery, nicely serrated; tips devoid of that wild appearance frequently found in lambs-wool; very fine and lustrous. Value, 14d. per lb.

295 F.

No. 5. Messrs. G. Russell and Son, Barunah Plains, Victoria; sample of very bold, bulky, well-grown wool; bright, soft, tips; little wild; lower in quality. Value, 13d. per lb.

296 F.

No. 6. W. H. Bullivant, Esq., Longerenong, Murtoa, Victoria; specimen of useful paying style; dense, lustrous, kind, good length. Value, 13d. per lb.

297 F.

No. 7. Collaroy Co., Merriwa, New South Wales; this sample, although lengthy, is thin, but of nice lustre; is bright, soft, heavy in condition. Value, 12d. per lb.

298 F.

No. 8. Hon. Phillip Russell, Carngham, Victoria; the type may be termed deep grown; is of good length; staple with a deep heavy wave, showing silvery lustre, reminding one of a fine Leicester; soft, silky; a most useful paying wool. Value, 12½d. per lb.

299 F.

No. 9. J. Riddoch, Yallum Park, South Australia; very similar type to the Carngham, having a rough heavy tip. Value, 11½d. per lb.

Competition in Long-woolled Class.

The long-wools all throughout the competition were very disappointing, so much so that only four specimens were selected from baled exhibits. The only high lustres in the Exhibition were non-competitive, exhibited by the Hon. H. J. Angus, Hill River, South Australia, in a most attractive collection; and it is to be regretted that that gentleman did not compete, as the visitors would have had a better opportunity of inspecting what is known as lustre or bright wools, and would have resulted very satisfactorily to the owner, in clearing the prize list.

300 F.

First prize for "pure Lincoln" was secured by J. Reid, Esq., Oamaru, New Zealand; is not a specimen one would have expected to be placed in such a prominent position; the staple is of good length (8 inches), but very faulty; the staple is thin; one half is a passable lustre, the remaining is dull, wasty, noily; when combed, the top would be too short for goods made from Lincolns. Spinning quality, 32s.; value, 8½d. per lb.

301 F.

First award for cross-bred hogget is to T. Turner, Esq., New Zealand; is a very useful wool; deep grown, bulky, bold, wavy, demi-combing, bright, strong; will produce good percentage of "top." Spinning quality, 36s.; value, 10½d. per lb.

302 F.

Second award is to Sir W. J. Clarke, Victoria, with a very useful lustrous combing; little finer than first placed sample, but heavier in condition; is very lengthy, sound, free. Spinning quality, 40s.; value, 10¼d. per lb.

303 F.

Cross-bred ewe, first prize, D. G. Hamilton, Esq., New Zealand; a desirable style of combing; of good length, strong, bright; free from any faulty fibres. Spinning quality, 36s.; value, 11d. per lb.

Mohair.

(*Mohair washed*).

166 F.

Sir S. Wilson's was the only exhibit, and was awarded a special prize. From my own extensive knowledge of that material, it is equal in excellence in its class to the Grand Champion prize wool, and is far before any of the best brands of Turkey or Asia Minor Mohair. I have classed and sorted many thousand bales, but the equal of this fleece—I may say the whole six fleeces exhibited—I never met. The staple is fully 7 inches long of metallic, lustrous hair, which falls in long, rich, massive folds. The flesh side is devoid of that cotty, kempy, fast growth, generally found on the flesh side. To anyone requiring the meaning of true lustre, an inspection of this will fully repay them. The particulars of the use of this produce are given at page 80. Spinning quality, 36s.; value, 2s. 8d. per lb.

Non-competitive Wools.

A.—*New South Wales.*

Nine specimens of wool from the Springfield stud flock, Goulburn; owned by A. L. Faithfull, Esq.

346 F.

No. 1. From Champion Prize ram at Wagga Wagga; weight of fleece, 17 lbs. This breed is fully described in the first part of this issue.

347 F.

No. 2. From one of the young stud rams, showing great length of staple, and a true Springfield type.

348 F.

No. 3. "Grand Prince 3rd"; fleece weighs 17 lbs.; 12 months' growth; a beautiful type of high bred wool, very even, of great density, lustre, softness, and elasticity; condition of the best, with a small black tip.

349 F.

No. 1. Stud ram, "Remus," by "Grand Prince"; weight of fleece, 17 lbs. 4 ozs.; wool of nice length, very dense, excellent lustre, free, even, distinctly serrated; soft, kind, silky touch; condition perfect.

350 F.

No. 5. Stud ram of high breeding and class; useful in length, superior quality; fibre silky, clear, sound, beautifully serrated, elastic, and lustrous; in nice healthy, rich condition.

351 F.

No. 6. Stud ram, "Silver Prince"; weight of fleece, 19½ lbs. in 1888, 20 lbs. in 1887. The extraordinary weights of this very light-conditioned wool are due entirely to great density, especially taking the length into consideration, which is much shorter than most of other exhibits. The fibre is small, bright, silky, soft, pliable, and kind.

352 F.

No. 7. Two-year-old stud ram, sired by "Royal Duke"; a most admirable attractive sample; is lengthy, with a bold, full, dense, silvery, wavy staple, having high quality, evenness, silky softness, good condition.

353 F.

No. 8. Ewe hogget, 13 months' growth; is of medium length, dense, even, soft, and silky; nice rich creamy colour; faultless condition.

354 F.

No. 9. Stud ewe; does not show to the same advantage as the rams; is bright and even; of medium growth, having hard, harsh, curly hair, not met with in any other.

Ten samples from Larras Lake, Molong, Bathurst, New South Wales, bred by James Lee, Esq.; are the progeny of pure Springfield blood.

355 F.

No. 1. Stud ram; a superior wool, of medium length, having a well-proportioned staple; is very even, bright, dense; healthy, rich condition.

356 F.

No. 2. Stud ram; little shorter than No. 1; is dense, soft, silky, kind, with great lustre and fineness; faultless condition.

357 F.

No. 3. Stud ram ; very lengthy silky combing ; is very free, strong, high in quality ; staple sound, wavy, kind, length and quality being well represented ; in nice rich creamy condition.

358 F.

No. 4. Stud ram ; combing, of good depth, with nice quality ; is even, close, well serrated, lustrous ; desirable style of wool.

359 F.

No. 5. Stud ewe ; short, dense, type ; very small fibre, finely serrated ; evidently a weighty wool, of a kind, silky nature ; in light condition.

360 F.

No. 6. Stud ewe ; little longer than No. 5 ; is equal in quality and condition.

361 F.

No. 7. Stud ewe ; resembling No. 5, with a little more open tip.

362 F.

No. 8. Stud ewe ; combing, of good length ; of superior quality ; very close, soft, pliable wool.

363 F.

No. 9. Stud ewe ; small, fine, short type ; lustrous, dense, silky, and kind.

364 F.

No. 10. Two-tooth stud ram ; wool of great character ; is well grown, with fineness ; staple full, bold, finely serrated, soft, silky, pliable, dense, and free.

Samples taken from fleeces bred and grown in the different districts of New South Wales.

304 F.

No. 1. Stud ram from near Deniliquin ; one of the most perfect types of high bred merino types in the Museum ; is of great length with quality ; the staple is full, silky, close, and bold ; fibre fine, strong, beautifully serrated, silvery lustre, kind to handle, clear, sound, pure, even all through ; little heavy in yolk ; will give a little noil from the open wasty tips. This exhibit resembles most of the samples taken from the "Grand Champion Prize Winners."

305 F.

No. 2. Stud ram from near Mudgee ; high class combing, of great character ; combines length, lustre, softness, elasticity ; is finely serrated ; in perfect condition.

306 F.

No. 3. Stud ram from Mudgee ; a dense, superb, combing, of great length and strength ; is very kind to the touch ; nice full wavy staple ; free, pliable ; beautiful in condition ; rich and creamy in appearance.

307 F.

No. 4. Stud ram from Mudgee ; stylish combing, of medium length ; fibre very fine ; serration small ; staple full, clear, bright, rich in yolk, with little black tips.

308 F, 309 F, 310 F, and 311 F.

Nos. 5, 6, 7, and 8. Mudgee stud rams ; these four specimens have a great resemblance, and might be from the same flock ; is of the deep, strong, combing type ; great length and lustre ; staple bold, full, broadly serrated ; in nice condition ; has a small black tip.

312 F.

No. 9. Ewe's wool, from near Mudgee ; soft, silky, fine combing, of excellent lengthy, wavy staple ; full strong, dense ; faultless condition.

313 F.

No. 10. Ewe's wool from near Mudgee ; resembling No. 9 very much, differing only in length, being little shorter.

314 F.

No. 11. Stud ram from near Deniliquin ; high class wool, of superior quality of combing ; long, silky, soft, free, dense, lustrous ; fibre very fine, well serrated, pliable, rich in creamy healthy yolk.

315 F.

No. 12. Stud ewe, from near Narrandera ; a small, fine, soft, silky combing ; very close, bright ; in perfect condition.

316 F.

No. 13. Stud ewe, from near Narrandera ; useful combing, of good length and quality ; is free, strong ; staple bold, wavy ; heavy in condition.

317 F.

No. 14. Stud ram, from near Albury ; a desirable type of useful combing ; lengthy, with fineness, density, softness ; rich in yolk.

318 F.

No. 15. Stud ram, from near Wagga Wagga ; deep grown, lustrous combing, inclined to be light and fuzzy ; will waste much.

319 F.

No. 16. Stud ram, from near Goulburn, evidently hogget ; medium length : staple a little open and curly ; inclined to wildness ; in nice condition.

320 F.

No. 17. Stud ram, from near Goulburn; deep, strong combing; staple full, well proportioned all through; of great density; is a hard, harsh wool.

321 F.

No. 18. Stud ram, from near Yass; very long, fine, close combing; sound, bright, free; little hard to the touch.

322 F.

No. 19. Ewe hogget, from near Yass; strong open-grown combing; lustrous, kind; very light in condition; will give much noil.

323 F.

No. 20. Stud ewe from near Murrurundi; wool of medium length; a little open; lustrous, fine, soft; light in condition.

324 F.

No. 21. Stud ewe, from Murrurundi; a strong, deep grown, open wool; heavy in condition; will lose much weight in working.

325 F.

No. 22. Ewe hogget, from near Walgett; well grown combing; length and quality desirable; bright, soft; heavy in condition.

326 F.

No. 23. Hogget, from near Walgett; long, soft, silky combing; free, sound, lustrous; staple trifle thin; nice healthy condition. It is very unusual to find wools from this district so free from fuzzy, open, earthy, noily tips, and throwing so much yolk.

327 F and 328 F.

Nos. 24 and 25. From near Young, New South Wales; much shorter than any in this class; heavy in yolk; will waste much; used in hosiery goods. Value, 8d. per lb.

343 F, 344 F, and 345 F.

Nos. 26, 27, and 28. From Wanganella, Riverina, New South Wales; are of much higher quality than usually found in this flock; is a showy, attractive, lustrous combing; in best of condition.

B.—Western Australia.

Specimens from E. F. Darlot, Esq., Beringarra Station, and Upper Murchison, representing produce from stud rams and ewes.

329 F.

No. 1. Imported ram, aged; cut $14\frac{1}{2}$ lbs.; is very dense, bright, with long, clear, sound, wavy staple; is soft and pliable; has been greatly effected by heat and red dust; will waste much. Value, 9d. per lb.

330 F.

No. 2. Station-bred ram ; cut $16\frac{1}{2}$ lbs. ; good, lengthy, sound, bright, combing ; well serrated ; is soft and pliable ; very dense. Value, $9\frac{1}{2}$ d. per lb.

331 F, 332 F, 333 F, 334 F, 335 F, and 336 F.

Nos. 3, 4, 5, 6, 7, and 8, cutting respectively 13, $14\frac{1}{2}$, $12\frac{1}{2}$, 14, $10\frac{1}{2}$, 12, $14\frac{1}{2}$, and 11 lbs. ; from two-tooth station-bred ewes ; are very well-grown, useful, payable combings, showing much character ; is fine, dense, high lustre, splendid serration, very elastic, soft, and kind ; has a red earthy tinge ; will give much noil. The most will spin to a 66s. ; value, $9\frac{1}{2}$ d. per lb.

337 F, and 338 F.

Nos. 9 and 10. Very deep, sound combing ; close, bright, wavy staple. Spinning quality, 56s. ; value, $8\frac{3}{4}$ d.

339 F, 340 F, 341 F, and 342 F.

Nos. 11, 12, 13, and 14. Samples taken common flock (shepherded) ; is a very heavy, strong combing ; good depth of staple ; is dense ; condition yolky, with heavy, red earthy, open, noily tips. Spinning quality, 56s. ; value, 8d. per lb.

H 392

